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

November2014

Our Ref: 213063r_Final Report

CONTENTS

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 Leicestershire[1].

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:

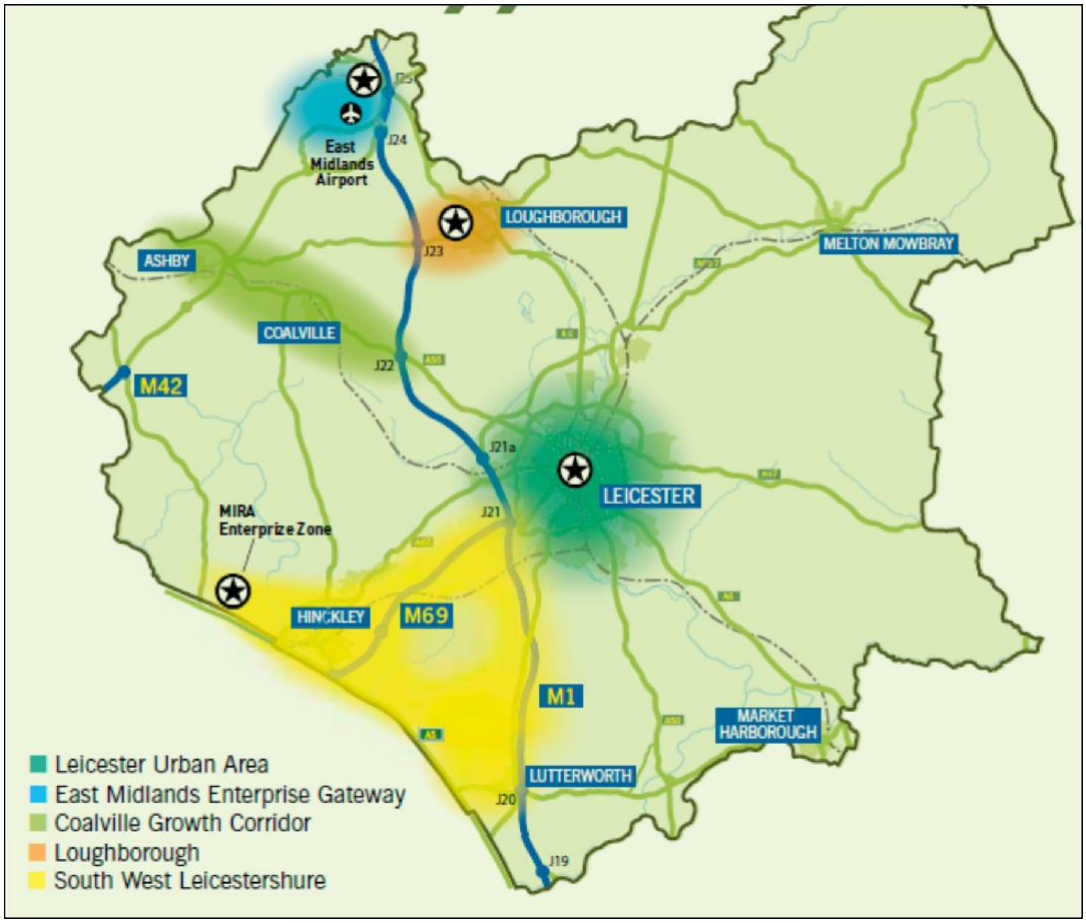
- A summary of the key issues, findings and forecasts presented in the Parts A and B reports;
- Policy advice with respect to identifying new sites and delivering sustainable growth; and
- Provides guidance of a more general nature alongside other practical measures for delivering sustainable growth.

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).

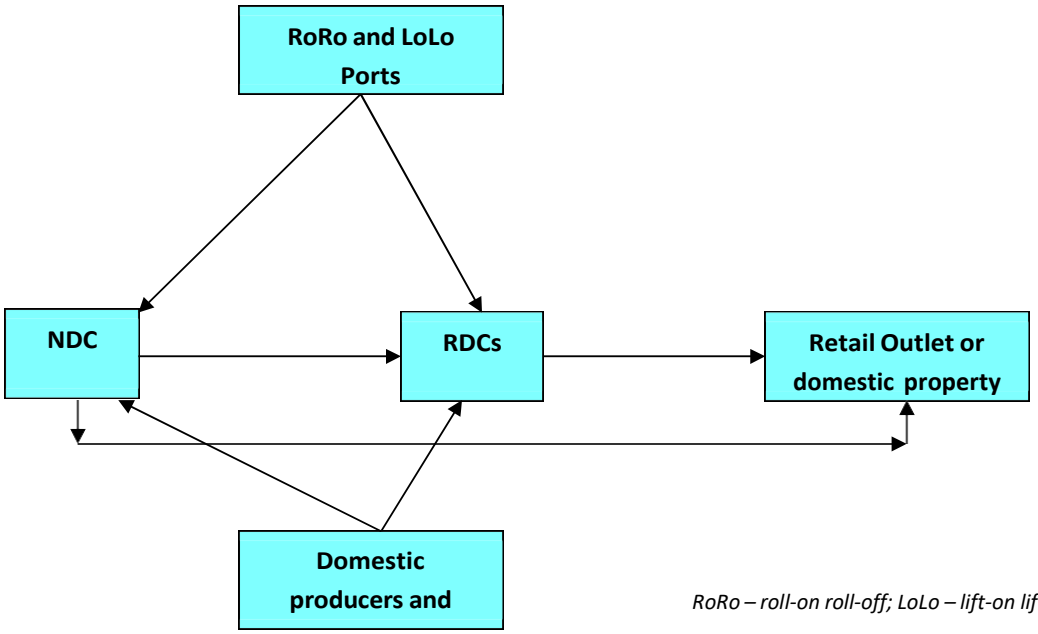
2.2 The distributors general cargo and retail/consumer type goods generally organise their supply chain strategies around large scale *warehouses* or *distribution centres*. Given their fixed nature and the large capital required to develop them, they can be considered as key geographically specific 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.



RoRo – roll-on roll-off; LoLo – lift-on lift-off

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 warehouse[3] 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)
East Midlands	*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)**	
East Midlands	*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)
East Midlands			
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

	GVA (£ millions)	
Year	Manufacturing	Wholsale/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

	000s sq m			
Year	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

	ha			
Year	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

	ha			
Year	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 Belts[5]. 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 developers[6];
- 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 with 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 2026[7].

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 unity. 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

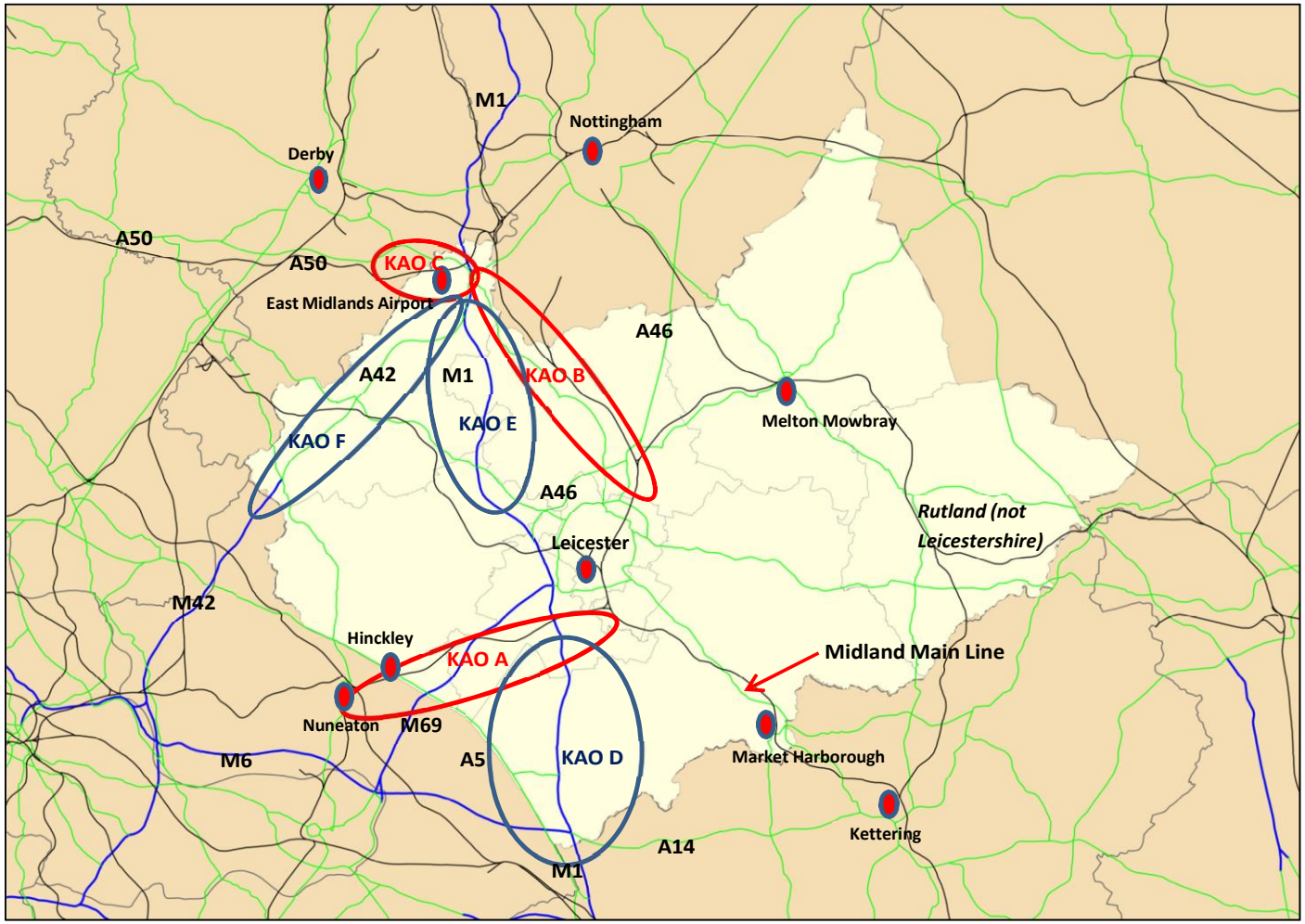
- The periodic commissioning of studies, in a similar manner to the former regional employment land use studies, and the updating the demand forecasts presented in this study.

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)



Key Areas of Opportunity (KAO) – road linked

Key Areas of Opportunity (KAO) – both rail-linked and road only connected sites

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. Once 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 growth 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 perspective[8], 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 million[9] 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 funding 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).

SFRIs 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).

Leicester and Leicestershire Strategic Distribution Sector Study

Part A Interim Report

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

MDS Transmodal Ltd
Savills

November 2014

Ref: 213063r_Part A_Final

CONTENTS

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 are to enable a better understanding of the sector and objectively determine future need, together with managing change and supporting sustainable economic growth. The completed study will recommend a strategy to enhance the area's current competitive advantage in the strategic distribution sector, and it will ultimately inform LLEP plans/strategies and the development of future local plans across Leicestershire[1].

1.2 The study is being 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 Leicestershire.

1.3 This document forms the formal written report covering *Part A* of the study (the requirements of Part A, taken from the study Terms of Reference, are detailed at the end of this document). It essentially forms a 'baseline' position with regards to the distribution sector in Leicestershire, and will subsequently inform Parts B and C of the study. In brief, it covers the following elements:

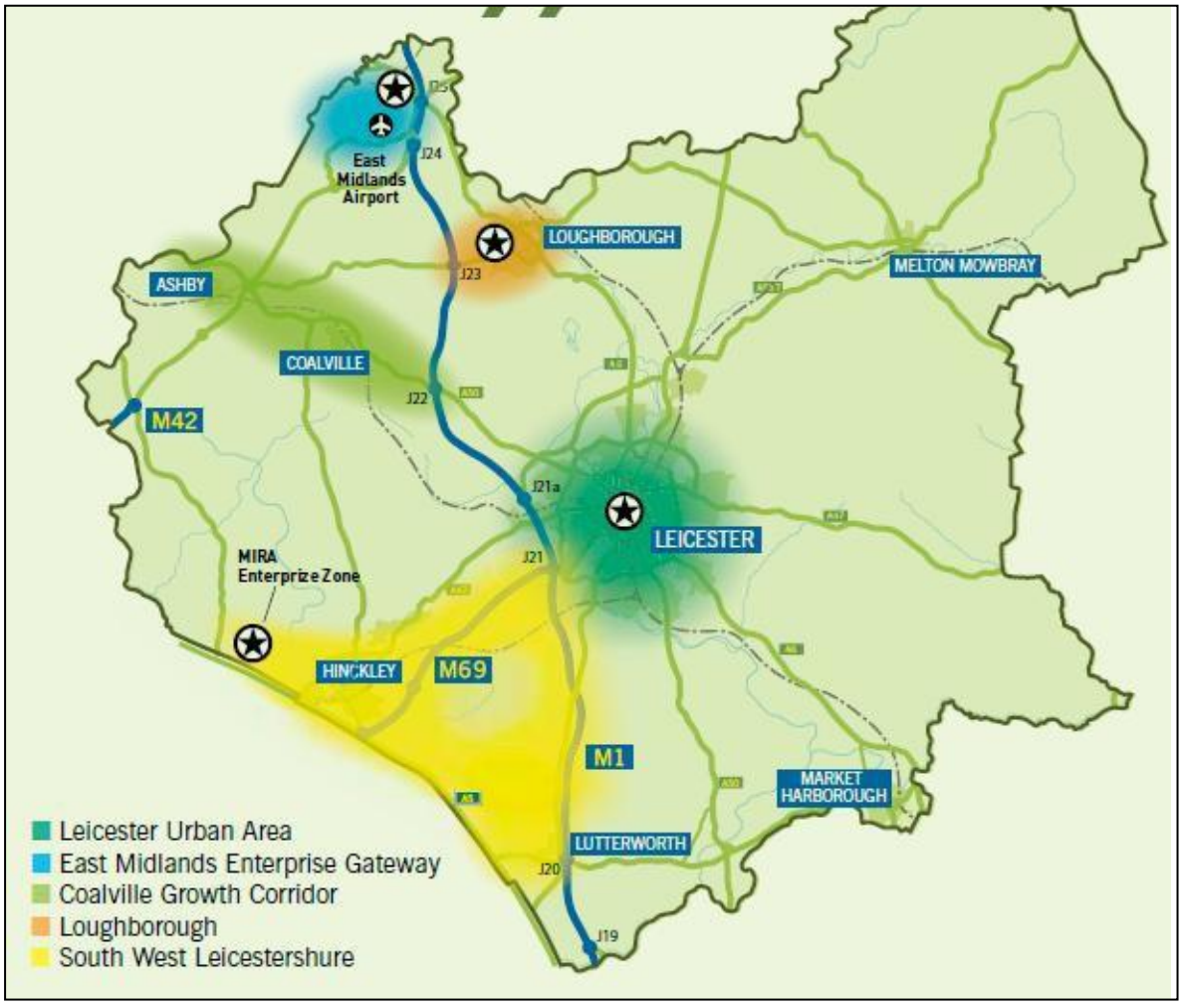
- An overview of the strategic distribution sector, both nationally and in Leicestershire;
- Quantifies existing freight flows to/from large scale warehousing in Leicestershire and the East Midlands;
- Establishes the existing large scale warehousing capacity in Leicestershire and the East Midlands;
- Describes the key locational characteristics enjoyed by commercially attractive logistics sites;
- An overview of the employment in the Leicestershire strategic distribution sector; and
- The current policy context for strategic distribution.

[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 therefore 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.

1.4 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.

1.5 It is 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 Gross Value Added (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



1.6 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. THE STRATEGIC DISTRIBUTION SECTOR IN LEICESTERSHIRE

2.1 The main purpose of this section of the report is twofold, namely:

- To provide a brief overview of the logistics/distribution sector nationally, the key commercial players and how supply chains are organised; and
- To undertake an overview of the sector in Leicestershire.

Section 2.1: Background

2.2 *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.

2.3 The growth in the service industries has fuelled the UK'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 for the UK (and mirrored in the regions) has shifted from factories (B2 and B1c use) towards distribution warehouses (B8 use).

2.4 The logistics market, as it relates to the distribution of finished goods and general cargo (unit load traffic), essentially consists of four different types of organisation or commercial players. These are briefly described below.

1. Manufacturers and producers. The organisations that manufacture/produce finished goods or semi-finished goods/components for input into a further production process.

The production of finished and semi-finished goods in global terms has shifted eastwards, to Eastern Europe and the Far East, particularly China, where labour and other costs are significantly lower. This is at the expense of domestically produced goods. Typical commodities which have shifted eastwards includes clothing, electronics, children's toys and other non-perishable goods (generally high volume but lower value commodities). Cost competitive unitised transport/logistics e.g. deep-sea containerised shipping, accompanied road haulage and more recently domestic rail freight, has also been an important factor driving this process. It has allowed the lower cost benefits of the Eastern Europe/Far East location to be maintained through the supply chain.

Despite this position, British and western European producers still have an important place in the market, particularly with regards to the production of perishable groceries,

beers/wines/spirits and White Goods (Leicestershire being an important food production location).

2. Suppliers and distributors (wholesalers). Traditionally, these organisations had an important position in the supply chain. Effectively, they were the 'interface' between the manufacturers and the retailers (see below), in that they purchased goods from manufacturers (including overseas based producers) before selling them on to the retail sector. This was particularly the case when the retail sector was dominated by small to medium sized players, as these organisations lacked the size to negotiate discounts or have the necessary contacts overseas.

However, the emergence of large retail chain stores has altered this relationship. The larger retailers now deal directly with the manufacturers, including overseas producers, thereby removing the intermediary (and therefore costs) from the supply chain. Given this position, the role of the wholesaler has diminished, with many suppliers/distributors today are simply the British distribution arm of an overseas manufacturer/producer.

3. Retailers. The organisations that sell finished products direct to the general public. As alluded to above, the past 20 years has witnessed the large growth of the major retail chain stores at the expense of small locally or regionally based outlets. In addition, the major grocery retail chains have been expanding rapidly into the non-food sector, for Tesco is now one of the leading clothes and electronics retailers. These large growth rates have been driven by, among other factors, their ability to source directly from overseas manufacturers (see above), together with managing the consequent logistics supply chains efficiently e.g. distribution centre locations, contracting logistics operators. Most of the major retail chain stores have also moved into internet retailing, with products either delivered direct to homes, via transport couriers, or to stores (so called click and collect).

4. Logistics operators. These are the organisations that transport and handle goods on behalf of the manufacturers, suppliers and retailers i.e. the first three organisations own the goods they ship out or receive in, whereas logistics operators are 'custodians' of goods while they are being moved and handled. This sector includes small hauliers, multi-national third party logistics operators (3PLs), shipping lines, ports and the rail freight operators.

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 (see below). 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. Given changing conditions in the market as described above, 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. The need for cost effective logistics strategies will be an important contributory factor to the process of maintaining and enhancing competitive positions.

Distribution Centres

2.6 The distributors of retail or 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. There are basically two types of distribution centre when defined by their functions and hinterland.

2.7 *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, particularly importers of electrical goods, clothing and other consumer cargo, who require facilities to consolidate imported goods before re-distribution to either a Regional Distribution Centre (see below) or direct to an end user (retail outlet or domestic household).

2.8 *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 e.g. Yorkshire, Midlands. More importantly their primary role is to consolidate and re-distribute goods in shorter periods of time, rather than acting as inventory holding locations. Many RDCs are effectively a covered 'cross-docking' facility, where inbound 'bulk' homogenous consignments from NDCs are split into smaller consignments and consolidated with other cargo (including goods delivered direct to the RDC) for re-distribution (often in a matter of hours) in mixed full size unit loads i.e. limited or no storage function. Consequently dwell times are much shorter at an RDC. They are therefore normally associated with retailers.

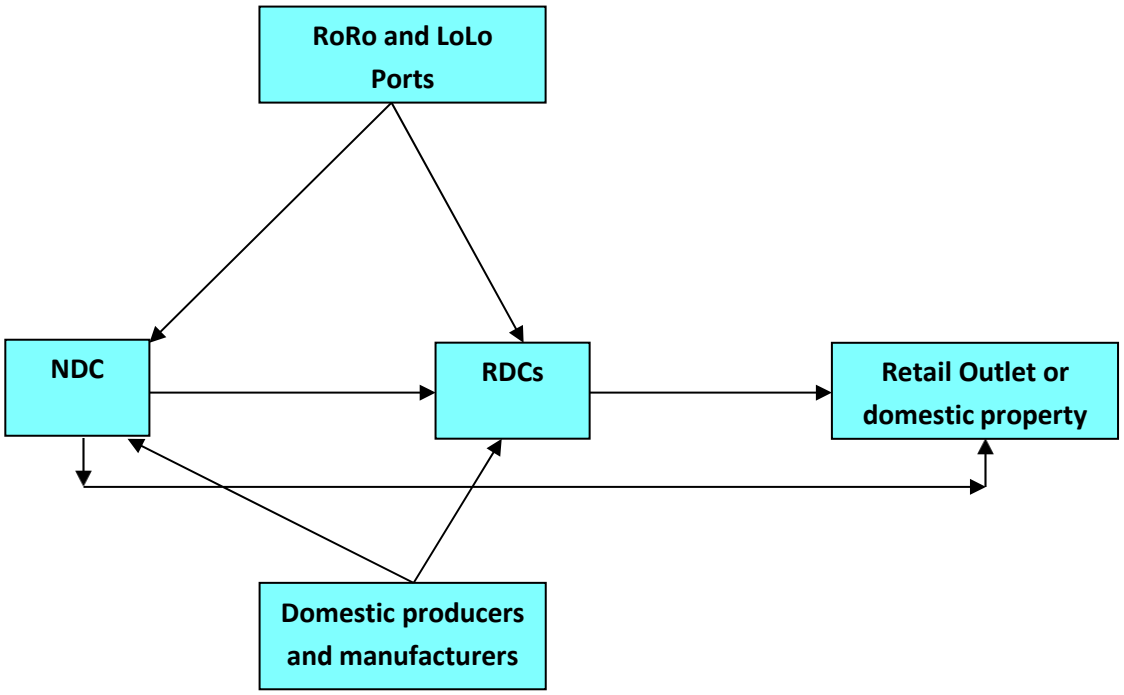
2.9 The actual day-to-day management and operation of NDCs and RDCs is often contracted out to third-party logistics providers, although some facilities are managed in-house by the suppliers or retailers themselves.

2.10 Most warehouse infrastructure in Great Britain has been developed by commercial property developers, such as ProLogis, Roxhill and Goodman, sometimes alongside an associated intermodal terminal development (e.g. DIRFT or Hams Hall). Essentially, property developers raise capital from investors and build new warehouse developments. Revenue is generated

and a financial return made on the investment by leasing the completed new warehouse to a 3PL, retailer or supplier on a long term basis. The key to their business model is consequently the ability to seek planning consent for appropriate warehouse developments at the competitive locations retailers or suppliers require.

Distribution Strategies: The 'Golden Triangle' Model

2.11 With respect to the inland distribution of finished goods and general cargo, 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.



RoRo – roll-on roll-off; LoLo – lift-on lift-off (see Glossary)

2.12 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).

2.13 Inbound flows to NDCs can be from domestic sources, but as alluded to above are now predominantly 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 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.

2.14 Under this established strategy, the southern part of the East Midlands region became the preferred location for 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 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.

2.15 The combination of these three factors meant the southern part of the East Midlands region became (from the 1980s) the competitive 'location of choice' in both supply chain cost and performance terms when sourcing and distributing on a national basis. The area became known as the '*golden triangle*'[2]. A significant proportion of the floor space developed in the East Midlands is therefore serving a national rather than regional hinterland, and as demonstrated by the analysis in Section 4 the region has attracted a quantum of floor space significantly above that which its wider economy would suggest. Also, as NDCs are predominantly undertaking a stock-holding role, their overall size tends to be larger when compared with RDCs where dwell times are much shorter (i.e. more floor space is required to undertake the storage function). This is also reflected on the analysis in Section 4, which shows that the mean size per unit of warehouses in the East Midlands is significantly above the national average.

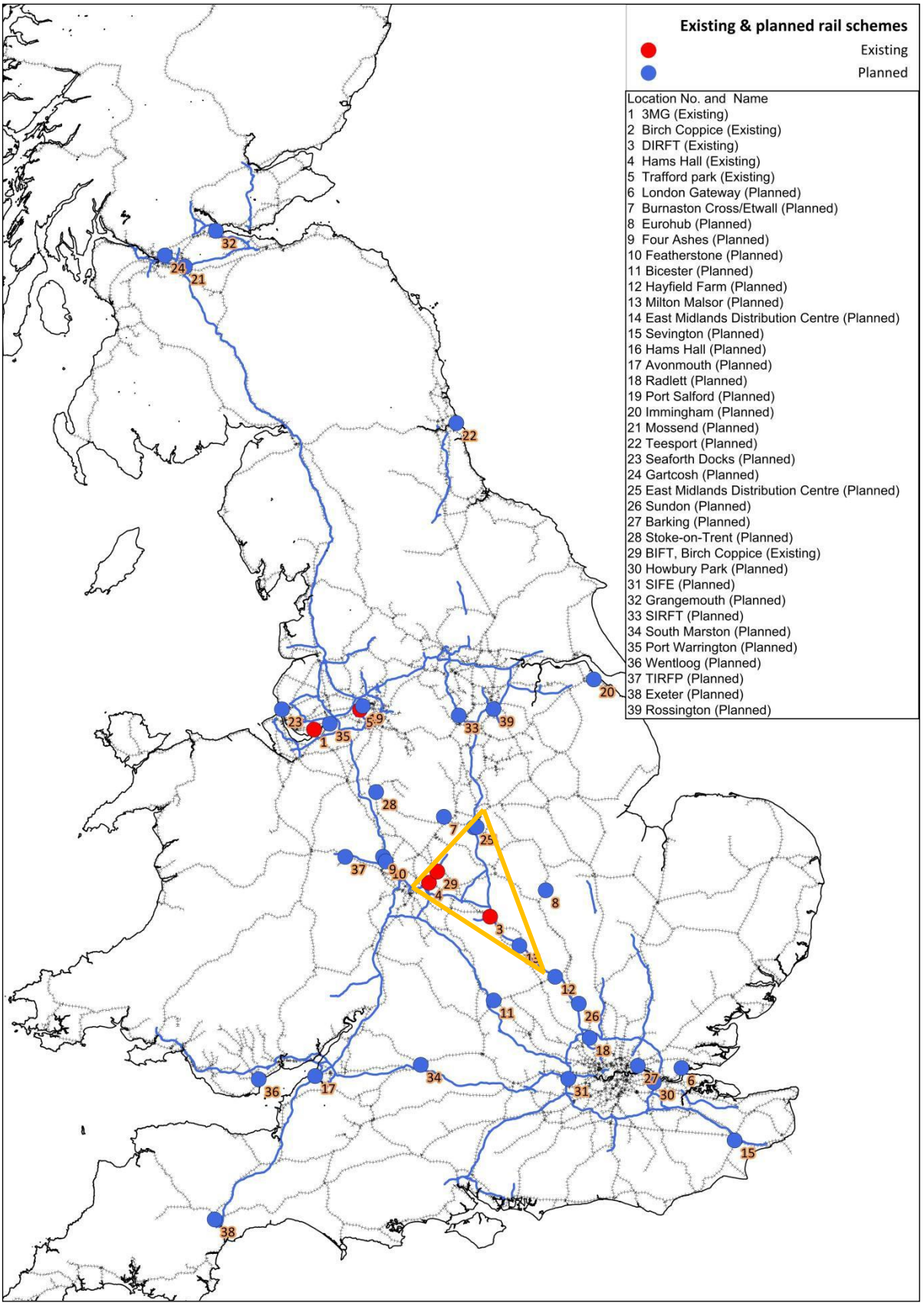
2.16 In contrast, the preferred location for large scale RDCs is close to the main conurbations of Britain, as this is where the main end-delivery points are located. Being in such a location allows the efficient operation of HGV equipment, thereby minimising re-distribution transport costs. This explains why property developers seek to develop sites and retailers

[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, and this is reflected in Map 2.1 below.

occupy warehouse units on what can be regarded as 'expensive real estate' close to urban areas.

2.17 Most NDCs to date have located on non rail-linked sites e.g. Magna Park Lutterworth close to M1/M6. A more recent development has been the establishment of rail-linked sites in the golden triangle. The three (current) rail-linked sites in the golden triangle are DIRFT, Hams Hall and Birch Coppice. The development at Castle Donington (East Midlands Distribution Centre) is currently being developed. Map 2.1 below shows the broad definition of the golden triangle along with the location of existing and planned rail-served strategic distribution sites nationally.

Map 2.1: The 'Golden Triangle' and Existing and Planned Rail-linked Strategic Distribution Sites Nationally



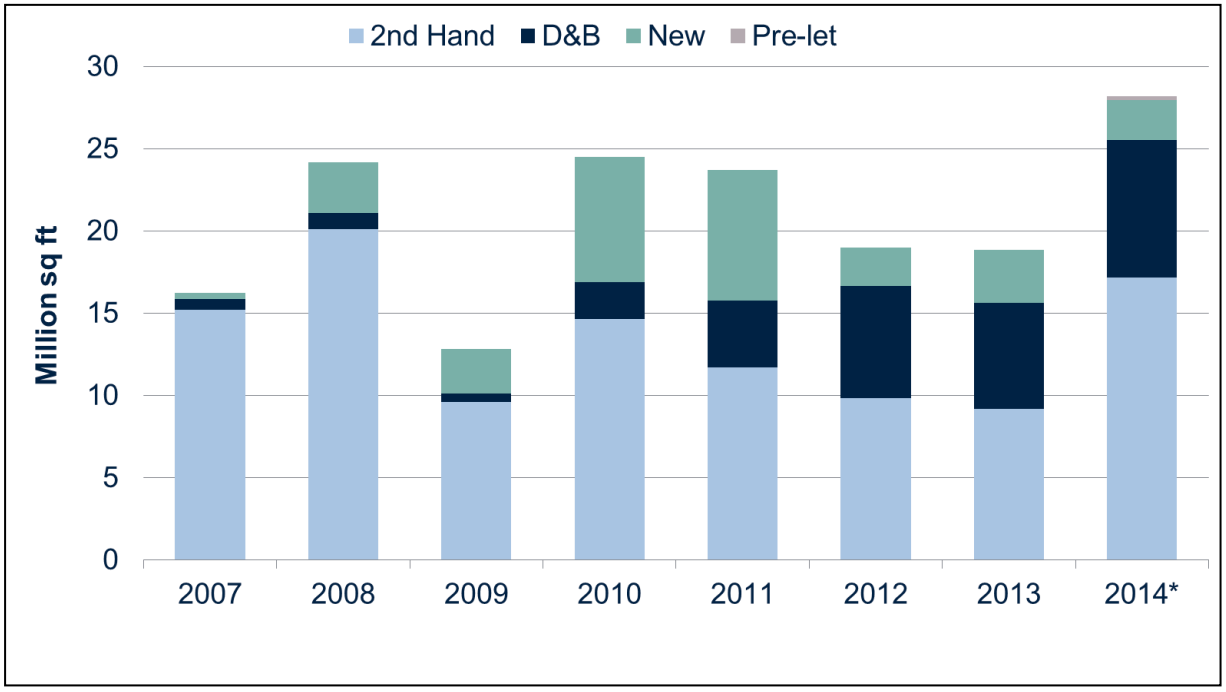
Section 2.2: Current Market Overview

Take-up

2.18 Take-up of large scale units to the end of 2013 totalled approximately 2.79 m sq m (30.1 m sq ft), up 32 % on 2012 figures; circa 60% of this was second hand space partly as a result of the continued lack of Grade A availability across the country. Whilst funding and economic conditions remain uncertain Savills expect to see an increase in demand from more than just the largest retailers and third party logistics providers (3PLs) in the final quarter. The highest take-up of 0.5 m sq m (5.6m sq ft) occurred in the North West with the next highest at (0.49m sq m) 5.3m sq ft in the East Midlands. Regional take-up ranking below these was Yorkshire and the Humber 0.47m sq m (5.1 m sq ft), West Midlands 0.45m sq m (4.9m sq ft), Scotland 0.22m sq m (2.4m sq ft), South East 0.18m sq m (1.9m sq ft), Wales 0.13m sq m (1.4m sq ft), South West 0.11m sq m (1.2m sq ft), Eastern 0.08m sq m (0.9m sq ft), Greater London 0.08m sq m (0.9m sq ft) and North East 0.05m sq m (0.5m sq ft).

2.19 Across the UK, developers and investors are seriously considering commencing on speculative schemes for the first time since 2007/8 in prime locations as pent up demand continues to be unable to be met by the current standing stock. Take-up is still dominated by the 3PLs and largest retailers, with over 90% of all deals done in 2013 being to businesses falling into one of these two categories.

Graph 2.1: Take-up from 2007 to 2014 (2014 being January to November)



D&B: design and build, New – Equivalent to 'Grade A'

Table 2.1: Take-up by Region 2013

Region	Take Up 2013		Percentage of Total UK Take Up
	Million sq m	Million sq ft	
Greater London	0.07	0.8	2.8%
South East	0.18	1.9	6.5%
South West	0.11	1.2	4.1%
Eastern	0.01	0.09	0.3%
East Midlands	0.50	5.4	18.6%
West Midlands	0.45	4.8	16.5%
Yorkshire and the Humber	0.46	4.9	16.8%
North West	0.51	5.5	18.9%
North East	0.06	0.6	2.1%
Scotland	0.23	2.5	8.6%
Wales	0.13	1.4	4.8%
Total	**2.70**	**29.09**	**100%**

Source: Savills

2.20 Online sales currently account for just 11% of total sales in the UK, and M&S and John Lewis' recent deals are good examples of how the UK's biggest retailers are gearing up to increase their online offering. As highlighted in Savills recent report *'E-tailing and the impact on Distribution Warehouses*' (appended) this domination will continue, with Savills predicting that 4,645,150 sq m (50 million sq ft) of space will be taken by retailers alone in the next five years as the full force of internet retailing is felt. M&S are currently reducing their number of warehouses from over 100 properties to just three mega-sheds. They have moved their website in-house (it was previously outsourced to Amazon) and now offer next day delivery. These changes have resulted in a 30% increase in online sales demonstrating the growth that's still in online retail sales.

2.21 The growth in online sales Average Weekly Spend over the past 5 years is shown in the table below.

Table 2.2: Average Weekly Spend 2008-2013

Year	2008	2009	2010	2011	2012	2013
Average Weekly Spend	£264.58	£340.76	£407.31	£480.89	£554.4	£628.22

Source: ONS

Availability

2.22 Availability across all size bands (to include small units up to 10,000 sq ft; medium units from 10,001 sq ft to 49,999 sq ft; mid 'box' from 50,000 to 99,999 sq ft and large scale/distribution warehouses over 100,000 sq ft) and across all regions has become severely restricted for Grade A space in prime locations which now represents less than 10% of all available stock. The North West has just 5% vacancy rate and just one Grade A development with Units 1 and 2 at Lancashire Business Park set to be completed by late summer. In terms of good quality second-hand space there is limited. Comet's 43,820 sq m (471,698 sq ft) former unit, XL on Statham Lane, is currently the largest available space.

2.23 The East Midlands has a relatively good supply of Grade A buildings with 10 units over 100,000 sq ft on the market at the end of 2013. Take up in the region was dominated by the logistics sector which accounted for circa 48% of all take up over 2013.

2.24 The South East has seen plenty of activity with the recent deals to Parcelforce and strong interest in the remaining Grade A units in the sub 18,580 sq m (200,000 sq ft) range. Yorkshire has slightly more units than the South East and North West which are the regions suffering the most chronic shortages. Yorkshire could accommodate occupiers looking for greater than 18,580 sq m (200,000 sq ft) in and Grade A units are available at LPP Sheffield, Sherburn 330, SIRFT and Victor and Valiant in Doncaster. Space now coming to the market is letting extremely quickly with Parcelforce's letting in Beckton, of the former LOCOG unit, an excellent example.

2.25 Stock that has stood empty since prior to the downturn has let recently. Examples include The Duke in Staffordshire recently let to Clipper to fulfil a Super Group contract, The Campbell Centre in Stoke that let to WRS and the Blue Planet letting to JCB. Although there has been a significant rise in Design and Build, at the other end of the market some occupiers need 'oven ready' space and are unwilling to pay the premiums attached to pre-lets. Therefore whilst Design and Build take-up is expected to increase, the second-hand market will continue to play a pivotal role and good quality second hand space in prime locations will continue to let in a very short time, as has been seen over the last 12-18 months.

Table 2.3: Current Availability of Grade A and Second Hand Large Scale Distribution Units by Region

Region	Availability		% Total UK Availability	% of Total Regional Stock (All Industrial)
	Million sq m	Million sq ft		
Greater London	0.12	1.25	2%	9.5%
South East	0.27	2.9	4%	7.1%
South West	0.36	3.9	5%	6.1%
Eastern	0.28	3	4%	5.8%
East Midlands	0.65	7	10%	4.1%
West Midlands	0.83	9	13%	16.5%
Yorkshire and the Humber	1.11	12	17%	No data
North West	1.5	16.5	23%	8.1%
North East	0.39	4.25	6%	8.0%
Scotland	0.56	6	8%	12%
Wales	0.56	6	2%	4.2%
Total	**6.63**	**71.8**	**100%**	

Source: Savills

Investment

2.26 Current sentiment for the industrial sector is extremely good with strong demand across the entire quality spectrum for both multi let estates and single let warehouses. Trading volumes throughout Quarter 1 2013 were relatively low at approximately £320milllion due to supply constraints with little stock being traded as investors sought to retain industrial ownerships.

2.27 Quarter 2 saw an increase with around £600million traded including Prologis' acquisition of a £247 million portfolio from London Metric. Strong demand against constrained supply has created increased values as investors are willing to see lower returns in recognition of a relatively low risk investment and potential rental growth. Distribution warehousing is the top performing Investment Property Databank sub-sector based on total returns so far in 2013. Against an improving occupational story the sector is considered defensive offering relatively high income returns, low obsolescence, above average lease lengths without the rental volatility suffered by offices and retail.

2.28 The sector is seeing increasing overseas interest as “Logistics” becomes established as a recognised global asset class driven by growing awareness of defensive characteristics and

favourable risk adjusted returns. Blackstone continue to be the leading overseas investor into UK logistics accounting for circa 20% of all acquisitions in 2012. Also, interest from Middle East (Gatehouse, 90 North), Russia (Delin Capital), North America (Chambers Street, Cabot) and Asia (Employer's Provident Fund of Malaysia). Overseas capital is also becoming indirectly exposed to the sector via investments in Prologis (Norges – circa £2billion) and Gazeley (Brookfield – circa £370 million).

2.29 An ongoing trend amongst UK based investors is acquiring units let on shorter leases (sub 10 years) which offer greater returns on capital (7.5%+) where there is potential for the tenant to remain in occupation beyond the term of the existing lease. Returns have reduced by between 25-100 basis points with the greatest movement shown by short income investments. These were considered relatively cheap to acquire and confidence in their ability to be re-geared or re-let has risen. Consequently returns have changed from 9% net initial yield (NIY) 2 years ago to sub 8% for the best stock.

2.30 Distribution offering "middle dated" income typically of around 10 years has also experienced a reduction in returns achievable from 7.5% - 8% to now stand at 7% to 7.5%. The availability of long dated income of 15 years plus is becoming rare, which reflects a lack of recent speculative development and reluctance from occupiers to commit to such lengthy terms. This market has been driven by prelets to occupiers such as The Co-op, Marks & Spencer, John Lewis, Brake Bros and Travis Perkins.

2.31 Long dated income is extremely sought after from UK institutions, private and overseas investors, attracting yields of between 5.5% to 6.5%. with premium prices achieved for index linked leases. Moving forwards, we expect prices to increase through 2014 as significant capital seeks exposure to the sector, far outweighing the availability of suitable product.

2.32 2013 was a strong year for large scale distribution units with confidence boosted by the increase in take up and growing occupational demand. The shortage of Grade A space is likely to lead to an increase in speculative development and upward pressure on rents in key regions as well as an increase in institutional investment in second hand stock.

Key Data Summary

Occupier Market

- Grade A / new supply (over 100,000 sq ft): 1.6m sq m (17.3m sq ft)
- Take-up of all grades of large scale distribution units to end 2013 was circa : 2.7 sq m (29.09 sq ft) (less than 10 % of this was Grade A stock)
- Five year average annual take-up is 1.9m sq m (20.7m sq ft)

- The top rent achieved in 2013: £9.32 per sq ft - DX Network Services Limited at Units 2, 3 & 4, Colnbrook Freight Centre (100,000 sq ft+) second hand building Heathrow

Investment Market

- Returns on large scale distribution units - Long term (c. 15 years) 6%; Medium term (c. 10 years); 7% Short term (c. 5 years) 7.75%.

Key Deals

- 28,920 sq m (311,282 sq ft) at Merlin 310,Trafford Park purchased by Henderson for £19.7m (7.10% NIY) from Aviva and let to TDG (UK) Ltd, lease expiry October 2017.
- 51,710 sq m (656,603 sq ft) at Argos Distribution Centre, Bedford purchased by London Metric for £40.0m (7.00% NIY) from a private investor and let to Argos, lease expiry December 2022.
- 102,190 sq m (1.1m sq ft) at Units 2 & 3, Brookfields Park, Manvers Way, near Rotherham purchased by Legal & General for £86.68m (5.5% NIY) from Tritax and let to Next Group Plc for 25 years from purchase completion.
- 62,070 sq m (668,918 sq ft) at Gazeley's Milton Keynes distribution park bearing their Magna Park brand name purchased by Aviva for £76.5m (4.85% NIY) from Gazeley and pre-let to John Lewis for 30 years from practical completion.

Outlook

2.33 Improving market conditions and online retail growth will see increased demand for prime logistics space. Demand over the next 12-18 months will remain strong for prime logistics space, with the biggest online retailers continuing to fuel the demand. Rents will rise and yields will fall for the best space.

2.34 The problem as alluded to earlier is that at the moment there is not enough high quality warehousing to satisfy the demand and so retailers are holding off taking space and in some cases looking to acquire on a Design and Build basis. Despite this lack of currently available Grade A space, it is anticipated that take-up will continue to increase throughout 2014 with returning consumer confidence ensuring the retailers come back to the market to satisfy growing demand.

Section 2.3: Leicestershire Overview

2.35 There is a strong manufacturing and mining heritage in Leicestershire but in line with national and regional trends, the logistics sector now dominates in terms of property take-up and employment. Parts of Leicestershire benefit from excellent accessibility to the national road

network; it is central to many production sites and there has been good availability of large sites close to motorway junctions. In addition to this the county has a good supply of labour.

2.36 Prime locations for B8 development are located to the south of the East Midlands region in Northamptonshire, within Leicestershire and along the A14 Corridor (e.g. Corby). Locations with the best transport links are favoured by occupiers and attract the highest levels of demand. However, this falls away sharply as distance from key road junctions increases. The prime locations are those areas most accessible to the M1 Corridor (Castle Donington, East Midlands Airport and Kegworth, to the North; Leicester, Lutterworth and Hinckley to the south of the county). These areas benefits from very good road linkages and connections to the major conurbations of Nottingham, Derby, Leicester, Northampton and Birmingham.

2.37 We have considered key locations for large scale distribution units in excess of circa 9,300 sq m (100,000 sq ft) for each district within Leicestershire.

North West Leicestershire

2.38 North West Leicestershire (population of approximately 93,500 (Census 2011)) benefits from good accessibility to the national road network with the A42 running through the district providing links to the south via the M42 and the north via the M1.

Key Schemes/Sites

Ashby-de-la-Zouch

2.39 Ashby-de-la-Zouch is positioned centrally within North West Leicestershire and benefits from good accessibility to the regional road network, being located at Junction 13 of the A42 and at the junction of the A511, which links Burton upon Trent to the east and Coalville to the west. Employment areas are focused to the north east of the town, at the junction of the A42 (Nottingham Road) and to the north at the junction of the A511 with Smisby Road.

Flagstaff Industrial Estate

2.40 Flagstaff Industrial Estate is located north of Nottingham Road adjacent to the A511 which gives good access to Junction 23 of the M1 at 13km to the south west. Occupiers include United Biscuits (McVitie's) who occupy a 30,140 sq m (324,389 sq ft) unit on a site of 21.54 acres. Other occupiers on the Estate include Trellborg Wheel Systems who occupy 13,010 sq m (140,000 sq ft.) There is neither land available for additional development nor space available on the estate.

Ashby Business Park

2.41 Ashby Business Park is a high quality office park situated to the south of Nottingham Road. Office occupiers include Siemens and Alstom. William Davis control a site of 4.05 ha (10 acres) net to the west of Coalfield Way, which is allocated for employment development in the NWL Local Plan. Outline planning permission was granted in 2007 for 20,156 sq m of B1/B8 development, with a limit of 9,100 sq m of B8 use. The planning permission has lapsed and the site is subject to a new application for 20 B1/B8 units, ranging in size from 800 sq m – 3,000 sq m with a total floor space of 20,156 sq m. The application is in outline but with full planning permission being sought for 9 of the units on the northern part of the site. A site directly to the west has planning permission for residential development and this will also impact upon the types of occupiers that will be suitable at Ashby Park. In light of the planning context of the site and surrounding proposed uses, it is likely that B8 development here will be targeted at the local market, with a focus on B1 offices and light industrial. The site is being marketed as being available for Design & Build B1/B2/B8 units, ranging from 464 sq m – 7,897 sq m.

G-Park

2.42 G- Park is located to the east of the A42 and south of the A511. The site is owned by Gazeley in joint venture with UK Coal and extends to 34.8ha (86 acres). The site has planning permission for up to 78,968 sq m (850,000 sq. ft) of rail-linked distribution space, benefiting from an existing rail connection to the Leicester to Burton freight line. The characteristics of this site mean it would appeal to regional, and potentially some national distribution centres. However, the proposed route of HS2 Phase 2 runs through this site and it is therefore probable that the flexibility of the site will be severely constrained.

Ivanhoe Business Park

2.43 Ivanhoe Business Park is situated off Smisby Road, to the north of Ashby-de-la-Zouch. The Park extends to 11.7ha gross (29 acres) in total and is controlled by Clowes Developments. Design and Build opportunities are available here from 929 - 15,794 sq. m (10,000 - 170,000 sq. ft) A range of smaller terraced units have been developed speculatively, with further proposed ranging from 4,500 sq. ft – 8,750 sq. ft. The developable land at the Business Park extended to approximately 8ha (c. 20 acres).

2.44 Other secondary accommodation can be found on Dents Road. The former Howard Tennens unit is available here. This unit extends to 1,527,090 sq m (141,870 sq Ft) and is available on flexible terms at a quoting rent of £0.99 per sq ft.

Bardon[3]

2.45 Bardon's strategic location, approximately 3km to the west of Junction 22 of the M1 via the A511, has resulted in a concentration of high quality employment floor space. There are 13 large scale distribution units located here.

Interlink Park

2.46 Interlink Park, a Wilson Bowden development, is home to a number of national occupiers including, Bunzl, Waitrose, Laura Ashley, Volvo and Brantano. Units are of a high specification and rents are circa £5.25 - £5.75 per sq ft.

2.47 There are no second hand large scale distribution units available although Link 73, a 6,820 sq m (73,408 sq ft) unit is currently vacant and on the market.

2.48 On Prime Link , a 2.75ha (6.8 acre) site located on Interlink Park, to the south of Beveridge Lane, Wilson Bowden are offering Design & Build opportunities from 1,394-12,077 sq m (15,000-130,000 sq ft). The site has planning permission for B1, B2 and B8 use.

Maximus 22

2.49 Maximus 22, a 5.87ha (14.5 acre) site, is being marketed at the junction of Beveridge Lane and West Lane in Bardon. The site has outline planning permission for up to 23,226 sq m (250,000 sq ft) of B1/B2/B8 floor space. Quoting rental is £5.25 per sq ft.

Interlink West

2.50 Proposals for significant new employment development at Interlink West are in the pipeline. Paragon (Coalville) Limited, working with developer, Graftongate, has submitted an outline application for 25ha (62 acres) net of employment development, to the south of Beveridge Lane between Bardon and Ellistown. Up to 120,000 sq m (1.3 million sq ft) of B2/B8 floor space is proposed with B8 units up to 330,000 sqft (30,650 sq m), as well as infrastructure works, including improvements to Junction 22 of the M1. The planning application is yet to be determined. The proposals form part of the South East Coalville Urban Extension.

Coalville

2.51 Coalville is the principal town in NWL, located approximately 7.25km to the west of Junction 22 of the M1 and 7.25km to the east of Junction 13 of the A42(M) at Ashby-de-la-Zouch. It is therefore not as accessible from the national road network as other locations within NWL (e.g. Bardon, Ashby). Demand for employment space in Coalville will therefore be predominantly limited to local occupiers with some regional demand.

[3] A small part of the site is located in Hinckley and Bosworth

Stephenson Way

2.52 The best quality premises offered in Coalville are to the south of the A511 (Stephenson Way), which provides links to Ashby and the M1. There is one large scale distribution unit here, providing 13,190 sq m (142,000 sq ft), located adjacent to the A511 and occupied by Hormann UK Ltd.

2.53 There is no consented land currently available for B8 development in Coalville and no second hand large scale distribution units available.

Measham

2.54 Measham is located to the south of Ashby-de-la-Zouch with good access to the motorway via the A42 (M) which joins the M42 at Junction 12.

Westminster Industrial Estate

2.55 Employment premises can be found on Westminster Industrial Estate to the south of the A42 off Tamworth Road. British Car Auctions occupy a significant site on Tamworth Road and there are a range of other units across the Industrial Estate. Other occupiers include A&B Produce. Measham 142, a unit of 13,225 sq m (142,358 sq ft) was sold to Wolseley in September 2013 at a price reflecting c. £35 per sq ft.

2.56 There is no consented land currently available for B8 development in Measham and no second hand large scale distribution units available.

Castle Donington

2.57 Castle Donington is located to the north of East Midlands Airport and is very accessible to the M1 corridor via Junction 1 of the A50. Junction 24A of the M1 is circa 4km to the north east of the town. The town's prime location means that it attracts demand for national distribution centres, as well as regional and local demand.

2.58 *East Midlands Airport* is a major economic draw in the district and region. The airport contains over 218 acres of commercial property, including a 17,094 sq m (184,000 sq ft) cargo portfolio, in addition to a further 66,424 sq m let on ground lease arrangements. The airport is home to a mix of aviation businesses. Major cargo operators at the airport include DHL, Royal Mail, UPS and TNT. In addition, Pegasus Business Park is home to office occupiers such as Price Waterhouse Coopers. The Park extends to 26ha with circa 15ha still available for development. All new development within the boundary of the Airport is limited to airport operational uses only.

2.59 *East Midlands Distribution Centre (EMDC)* is located approximately 3km to the north of East Midlands Airport, to the north west of Castle Donington. The scheme is very accessible to the

national road network. The site also benefits from a dedicated rail link. The site is controlled by Clowes Developments and is targeted at National and Regional Distribution Centres. However as a 40ha site with no potential for expansion it may be considered too small to be classed as a Strategic Rail Freight Interchange (SRFI, as defined by national policy).

2.60 Recent take-up of large scale distribution units at EMDC include a leasehold bespoke unit of 83,850 sq m (902,575 sq ft.) completed for M&S in December 2011 on a 24.3ha site, formerly home to the Castle Donington Power Station. The rent achieved was £4.68 per sq ft.

2.61 There are 20.39ha (50.38 acres) remaining at EMDC. D&B opportunities are available from 2,787 sq. m – 50,911 sq m (30,000 sq. ft – 548,000 sq. ft) with a total floor space capacity of 120,774 sq m (1.3 million sq ft). There are no existing units available at EMDC. Rents are in the region of £4.75 - £5.25 per sq ft.

2.62 Willow Farm Business Park is located to the north of Castle Donington, approximately 2.4km from J24A of the M1 and less than a mile from the A50. Occupiers here include Toyota Tsusho and Ceva Logistics.

Kegworth

2.63 Kegworth is extremely well located being adjacent to the M1 and close to East Midlands airport.

2.64 Cott Beverages occupy an 39,480 sq m (425,000 sq ft) unit in Kegworth adjacent to the A6, approximately 1km south east of Junction 24 of the M1.

East Midlands Gateway

2.65 Roxhill's Development Consent Order (DCO) application for a SRFI next to J24 of the M1 (and to the north of East Midlands Airport) was accepted for examination (by the Planning Inspectorate) in September 2014. In brief, it will comprise:

- An intermodal freight terminal accommodating 12 to 16 trains per day and trains of up to 775m long;
- Up to 557,414 sq m of rail-served warehousing;
- A new rail line connecting the terminal to the Nottingham to Birmingham Freight only line;
- New road infrastructure and works to the existing road infrastructure;
- Structural earthworks to create development plots and landscape zones;
- Strategic landscaping and open space, including alterations to public rights of way and the creation of new publicly accessible open areas.

2.66 The proposals comprise circa 95.5ha (236 acres) of B8 rail-linked distribution land. Demand for this land will predominantly come from those occupiers seeking to serve the national and regional market.

Local Plan Considerations

2.67 The North West Leicestershire Local Plan was adopted by the council in August 2002. In line with the Planning and Compulsory Purchase Act 2004, a request to extend the life of a number of the Local Plan policies was submitted to the Secretary of State. The local plan policies that would have been most relevant to strategic distribution development were not extended and subsequently there are no applicable policies from the 2002 local plan to consider here.

2.68 Whilst the North West Leicestershire Core Strategy has now been withdrawn, it sought to focus the majority of employment development in the Coalville Urban Area where possible (including Bardon) with Ashby de la Zouch considered the next most preferable location for employment development. A new Local Plan is being prepared which will include the allocation of sites for employment purposes

Charnwood

2.69 Charnwood in northern Leicestershire (population 166,100 Census 2011) is located between Nottingham, Derby and Leicester. And benefits from good access to the M1. A third of the 166,100 population live in Loughborough but the areas of Birstall and Thurmaston close to Leicester city are also densely populated.

Key Schemes and Sites

Loughborough

2.70 Loughborough is the second largest settlement in Leicestershire with a population of approximately 55,000. Junction 23 of the M1 is located approximately 6.5km to the west of the town and it lies on the busy A6(T), which links Junction 24 of the M1 Motorway to Leicester via Loughborough. East Midlands Airport, which provides domestic and international flights, is approximately 11.25km to the north west of the town centre.

2.71 The majority of employment land lies to the north east of the town adjacent to A6 within the LE11 postal districts.

2.72 VOA data indicates 3 large scale distribution warehouses in Loughborough with a total floor area of 63,000 sq m (678,000 sq ft.). One of these units of 18,000 sq m (202,000 sq ft) on North Road, LE11 1QJ is currently vacant and available at a rent of £500,000 per annum.

Charnwood Astrazeneca, Bishop Meadow Road

2.73 A 28.3ha (70 acre) research and development facility (formerly AstraZeneca) providing predominantly B1 and B2 uses with some small B8 facilities is underway but this is aimed at small scale occupiers primarily associated with research and development.

2.74 *Dishley Grange, Derby Road* is a 8ha (20 acre) site which will provide approximately 37,160 sq m (400,000 sq ft) of mixed industrial, warehouse and office accommodation in units from 460 sq m (5,000 sq ft) to 27,870 sq m (300,000 sq ft). The scheme is located to the north of Loughborough with good access to Derby Road A6.

Shepshed

2.75 Shepshed is very well located being adjacent to J23 of the M1 which is accessed via the A512. Accordingly industrial development has been concentrated along the A512 (Ashby Road).

Ashby Road

2.76 Fred Sherwood Transport occupies a units of 13,750 sq m (148,000 sq ft) to the north of the A512 and Boal Ltd (manufacturers)occupy a 11,890 sq m (128,000 sq ft on Ashby Road east (A512).

Thurmaston

Thurmaston Industrial Estate

2.77 The estate which is owned by Charles Street Buildings Group is located to the north of Leicester. The M1 is approximately 13.5km to the South West and can be accessed from J22 for north bound traffic, or south bound at J21A. A 3.3ha (8.3 acre) plot is available which could accommodate a (18,580 sq m) 200,000 sq ft industrial/ warehouse unit.

Local Plan Considerations

2.78 The Pre-Submission Draft Charnwood Local Plan 2006 to 2028, Core Strategy dated June 2013, Policy CS1 States that the priority for growth will be the Leicester Principal Urban Area where up to 46 hectares (114 acres) of employment land will be delivered by 2028. This will be delivered in a sustainable urban extension to the north east of Leicester, delivering up to 13 hectares (32 acres) of employment by 2028; up to 15 hectares (37 acres) of employment as part of a sustainable urban extension to the north of Birstall; and a direction of growth for up to 16 hectares (40 acres) of general employment land within the Watermead

Regeneration corridor. The strategy also envisages that up to 22 hectares (54 acres) of employment land will be delivered in Shepshed and Loughborough by 2028.

2.79 Policy CS6 commits to delivering a total of up to 75 hectares (185 acres) of land for strategic employment purposes by 2028 in accordance with Policy CS1.

Melton

2.80 Melton is a relatively rural Borough in the North East Leicestershire borders with a population of approximately 50,500 (2011 census).

Key Schemes and Sites

Melton

Old Dalby Business Park

2.81 Old Dalby Business Park, owned by Highcross is a 15.8ha (39 acre) business park located approximately 13km to the north west of Melton Mowbray and benefits from improved access to the M1 as a result of the recent dualling of the A46. Two large scale distribution units are located on this site. Unit 3, a 12,630 sq m (136,000 sq ft) occupied by Brands 2 Hands and Unit 1, a 12,360 sq m (133,000 sq ft) unit. Toyota and East Midlands Pharmaceuticals also occupy units on the site. The majority of the accommodation is in refurbished units. There are additional parcels of land available up to 3.2ha (8 acres) with outline consent for industrial uses.

Leicester Road Industrial Estate, Melton Mowbray

2.82 Leicester Road Industrial Estate to the west on the A607 has good access to the highways network. There is one unit in excess of 9,290 sq m (100,000 sq ft) occupied as a research, design and production facility by Laporte Alphagary Ltd.

Asfordby Business Park

2.83 The Asfordby Business Park site on the former Asfordby coal mine to the east of Melton Mowbray has access to the A46 which leads directly onto the M1 at Junction 21(a). A potential 16ha (40 acres) of additional development land is available. A disused twin track railway line, which could be reinstated, serves the site and a large power supply, providing tenants with 7-40 MVA, is available.

Holwell Works

2.84 The site at Holwell Works 12ha (30 acres) is situated adjacent to the southern boundary of Asfordby Business Park. Outline consent exists for development of 35,080 sq metres of B1 (C), B2 and B8 industrial and warehouse units on the site.

Saxby Road Industrial Estate, Melton Mowbray

2.85 Asfordby Storage and Haulage Ltd occupy the largest unit in the Borough; a 53,420 sq m (575,000 sq ft) unit on an industrial estate to the east of the town, adjacent to the A607.

Mill Street, Melton Mowbray

2.86 Mars Petcare occupy a 46,450 sq m (500,000 sq ft) unit on Mill Street in the centre of the town, close to the A606.

Local Plan Considerations

2.87 The development plan for the Borough is the adopted Melton Local Plan (1999) and the 'saved policies' which it contains, subject to their compatibility with the NPPF. Following the withdrawal of the Melton Local Development Framework Core Strategy in April 2013, work is progressing on the production of a new Melton Local Plan with a draft Issues and Options to be produced in autumn 2014.

Leicester City

2.88 Leicester Urban Area has a population on 330,000 (2011 Census). The city and indeed South Leicestershire as a whole, benefits from good accessibility being positioned centrally within the UK and extremely well serviced with road infrastructure. In particular the M1 and M69 provide immediate links to the middle of the central motorway system. The wider area provides an extensive source of local labour with good access to public transport. However much of the existing industrial stock is dated and not considered fit for purpose.

Key Schemes

Leicester

2.89 Three large-scale distribution units in excess of 9,290sq m (100,000sq ft) in Leicester are found on the Braunstone Frith Industrial Estate in the LE3 postal district[4]. This locations afford excellent access to the M1 via junction 21a.

[4] Part of the LE3 postcode, while generally considered part of the wider Leicester urban area, actually extends into Blaby District.

Beaumont Leys

2.90 The area in Beaumont Leys to the south of the A46 provides a number of large units including Walker's Snacks (Distribution) Ltd who occupy 21,370 sq m (230,000 sq ft).

Hamilton Business Park

2.91 The industrial area to the west of Thurmaston Lane and 6.5km east of Leicester, known as Hamilton Business Park is home to LPC (UK) Ltd who occupy a modern 21,970 sq m (230,000 sq ft) unit used as a paper mill. This location would not be favoured by logistics operators compared to Magna Park due to the poor accessibility to the motorway network.

Local Plan Considerations

2.92 Leicester City Local Development Framework Core Strategy, adopted November 2014 identifies locations for significant new employment development in *Policy 1, Location of Development*, as :-

- City Centre (office based employment);
- Abbey Meadows Science and Innovation Park; (science and technology and related knowledge
- intensive business); and
- Up to 10 hectares of land at Ashton Green.

2.93 *Core Strategy Policy 10* addresses employment opportunities. It notes that 'The City Council will work with partners to ensure that Leicester has a thriving and diverse business community that attracts jobs and investment to the City' and that 'It will prepare a revised Employment Land Study to provide updated guidance on the assessment of "fitness for purpose" i.e. quality of employment land'. It states that 'Employment land shown on the Proposals Map will be retained for B1(c), B2 and B8 uses' and that 'The City Council will support the early delivery of strategic employment sites for low carbon, sustainable development beyond the City boundary'. The Site Allocations and Development Management Policies DPD1 will identify land to be released from employment use. In lower quality employment areas, as defined by the existing Employment Land SPD (2007) and then the revised Employment Land Study, day nurseries, places of worship, car show rooms and other uses that do not have a use class but are commonly found in industrial estates will be acceptable in principle.

2.94 *Core Strategy Policy 14* addresses transport. With respect to freight, it the policy notes that it will provide 'opportunities for sustainable freight movement where possible on rail and waterways by working with Network Rail, British Waterways and other agencies in considering potential low key freight uses and waterside freight connection'. It also states

that 'The delivery of highways and transport improvements as guided by the statutory Local Transport Plan and the Leicester and Leicestershire Growth Infrastructure Assessment, through joint working with neighbouring Transport Authorities and districts where necessary'.

Blaby District

2.95 Blaby District has a population of approximately 94,000 (census 2011) and is located to the south west of Leicester city and benefits from its close proximity to J21 of the M1.

Key Schemes

Cambridge Road Industrial Estate, Whetstone

2.96 The area known as the Cambridge Road Industrial Estate, including the Whittle Estate (approximately 50 acres), Whiteacres (a Wilson Bowden development) and Ashville Way Trading Estate, is located approximately 8km south of Leicester City Centre and circa 4.8km south of the M1/M69 intersection (J21). Access to Junction 21 is via the A426 (Leicester Road/Blaby By-pass) and the A563 (Soar Valley Way).

2.97 The area is predominantly characterised by commercial, warehousing and manufacturing uses. Occupiers include Beam Global Distribution who occupy 15,470 sq m (166,476 sq ft.). Elms Depot, a 13,010 sq m (140,000 sq ft) unit situated immediately off Cambridge Road, is jointly occupied by H W Coates, a specialist in the warehousing and distribution of packaged chemicals and shoe retailers the Dune Group. The Whittle Estate (former GEC) has one large scale distribution unitAlstec Ltd, an engineering company, occupy a 20,720 sq m (223,000 sq ft) unit on this estate.

Meridian Business Park and Grove Park

2.98 These 2 business parks are very well situated at Junction 21 of the M1 and M69, some 4.8km from the centre of Leicester and therefore provide a number of large scale distribution warehouses. Espo, a public sector procurement company occupy a 15,330 sq m (165,000 sq ft) unit and British Gas's national distribution centre of 14,400 sq m (155,000 sq ft) is also located at Grove Park. Royal Mail APC have a 11,150 sq m (120,000 sq ft) unit on Centurion Way and Boden occupy a 9,100 sq m (98,000 sq ft) unit on Meridian West.

Optimus Point, Glenfield

2.99 Optimus Point is a new 30 hectare commercial development situated close to junction 21A of the M1 motorway. Wilson Bowden Developments has successfully promoted the site through the planning system and obtained outline planning consent in October '11 for a mixed use scheme including 62,390 sq m (671,540 sq ft) of warehouse units.

Mill Lane Industrial Estate, Glenfield

2.100 Six large scale distribution units in excess of 9,290sq m (100,000sq ft) are found on the Mill Land Industrial Estate, Glenfield. This location affords excellent access to the M1 via junction 21a.

Local Plan Considerations

2.101 The Blaby District Core Strategy, Adopted (February 2013), cites The Leicester and Leicestershire Employment Land Study (2008) and Blaby District Employment Land and Premises Study (refresh) (2011) as indicating a need for additional employment opportunities within the District of Blaby to satisfy both local and strategic requirements.

2.102 *Policy CS4* addresses the Strategic Employment Site – 'Land east of the Warrens (south of the M69) at Enderby is the preferred location for a Strategic Employment Site (SES) in conjunction with the proposed Sustainable Urban Extension (SUE) at Lubbesthorpe. The SES will provide some 21 hectares (net) of employment land. The type of employment land provided will include B1, B2 and B8 uses. The quantity/split of these uses will be based on market demand, the needs of investors, the requirements for local businesses and inward investors. In order to help meet the employment needs of the District, the SES should provide a range of employment opportunities (B1, B2 and B8).

2.103 *Policy CS6* addresses employment and overall seeks to provide the appropriate quantity, quality and mix of employment opportunities to meet the needs of the District's current and future populations, and to meet strategic employment needs. The policy supports the provision of a 21 hectares (net) Strategic Employment Site (SES) at Enderby adjoining the development of a Sustainable Urban Extension (SUE) at Lubbesthorpe in accordance with Policy CS4.

2.104 *Policy CS10 (Transport)* also notes 'within strategic (including national and regional) and financial constraints, Blaby District Council will support the exploration of realistic opportunities for improving rail based movement of goods and people'.

Oadby and Wigston

2.105 The Borough of Oadby and Wigston is located to the south east of Leicester City and has a population of circa 56,000 (Census 2011). It includes eight established employment areas, where a large proportion of the stock was developed prior to 1970. Relative to other districts in South Leicester it has poor access to the M1 and M69.

Key Schemes

Wigston

Chartwell Drive

2.106 Chartwell Drive is an established industrial location in Wigston to the south of Leicester. Access to the Outer Distributor Road A563 is via Stonesby Avenue, Aylestone Lane and West Avenue. The city centre and J21 M1/M69 are 6.4km distant. Cromwell, an industrial tool distributor occupy 27,870 sq m (300,000 sq ft) unit here.

Kirkdale Road

2.107 One other large scale industrial unit, 10,600 sq m (114,048 sq ft) located on Kirkdale Road, has been vacant and on the market for a number of years. This has access to the outer distributor Road, A563, thereby J21 of the M1/M69 via Stonesby Avenue, Aylestone Lane and West Avenue.

2.108 There is no consented land currently available for B8 development in Wigston and no second hand large scale distribution units available.

Local Plan Considerations

2.109 Oadby and Wigston Core Strategy DPD, adopted September 2010, identifies a number of employment areas but affirms that much of the accommodation in these areas is of low quality and has poor accessibility to the larger trunk roads such as the M1 and M69 compared to other nearby districts. There is limited demand for land in the Borough for storage and distribution type employment uses and employment land to be retained will cater predominantly for local need from existing businesses wishing to expand and for smaller business units to support start-up businesses.

2.110 The focus of the core strategy is therefore on retaining and regenerating Identified Employment Areas.

2.111 *Core Strategy Policy 1* addresses generally spatial development in the Borough. It notes that the council will 'Identify land for the development of 1.3 hectares of industrial and warehousing land between 2008 and 2026'. Paragraphs 5.10 to 5.15 deal with employment growth. It states that Oadby and Wigston forms part of the wider Leicester office, industrial and warehousing market. The supply demand gap analysis suggests an additional requirement for 9 hectares for industrial and warehousing development. It concludes that the scope for meeting these requirements within the Borough is limited, the main opportunity being 1.3 hectares of industrial and warehousing land (comprising 0.8 hectares at the Sports Field off Tigers Way completed in 2009 and 0.6 hectares at Land West off Magna

Road, Magna Industrial Estate an outstanding allocation). It notes that the 3.1 hectare Wigston Railway Triangle site is constrained by the need for a railway bridge and cannot be considered as part of the available development land.

2.112 In the absence of additional suitable land in the Borough, the balance 7.6 hectares of industrial and warehousing land will be added to effective demand in the City of Leicester and the neighbouring districts of Blaby and Harborough.

Harborough

2.113 Harborough has a population of circa 85,000 (Census 2011) and its centrally located, well connected location has led to it becoming a centre for road-based national and regional distribution with the development by Gazeley of Magna Park at Lutterworth. Harborough is a predominantly rural area and much of the labour employed at Magna Park commutes from outside Leicestershire. The largest town in the district, Market Harborough, has no large scale distribution units nor consented employment land capable of accommodating them.

Key Schemes

Lutterworth

2.114 Lutterworth is a small market town in southern Leicestershire benefiting from excellent access to the M1.

Magna Park

2.115 Magna Park is the largest central distribution centre in the UK and in 2008 it was the largest in Europe. It lies in the area bounded by the M1, M6 and M69 motorway to the west of Lutterworth town centre and only a short drive from J20 of the M1 (4km), J1 of the M69 (7km) and within a reasonable commute of J2 of the M6 (7km).

2.116 There are 33 units on the park in excess of 9,290 sq m (100,000 sq ft) and 2 in excess of 92,900 sq m (1,000,000 sq ft); Plot 5320/5420, Hawke Way, a 111,480 sq m (1,200,000 sq ft) unit occupied by TNT and Plot 5410, Hunter Boulevard, a 102,190 sq m (1,100,000 sq ft) unit occupied by Asda.

2.117 Other occupiers include Nissan Motors, Renault UK, VWR International, Steinhoff UK, Stobart group, Wincanton, Asda Walmart, Toyota, Cert Octavian.

2.118 Plot 2110 with detailed planning consent for a single facility of 10,546 sq m (113,520 sq ft) is currently available.

Churchill Way Industrial Estate

2.119 UK Distributor (Footwear) Ltd occupy a 13,470 sq m (145,000 sq ft) unit located on the Churchill Way Industrial Estate on the southern edge of the village of Fleckney , approximately 13km south of Leicester and accessed via the A50.

2.120 With the exception of the Magna Park site there is no consented land currently available for B8 development in Lutterworth and no second hand large scale distribution units available.

Local Plan Considerations

2.121 The Spatial Strategy for Harborough contained in the Harborough District Local Development Framework Core Strategy 2006 – 2028 (adopted Nov 2011) cites the Leicester and Leicestershire Employment Land Study (2008) as indicating a moderate, local need for additional employment land. Policy CS1 proposes to allocate new employment land, in established employment centres, within the Allocations Development Plan Document, to ensure that any losses in the overall stock of employment land are suitably replaced and to identify and safeguard existing sites of important employment use through the designation of Key Employment Areas.

2.122 *Core Strategy Policy 7* addresses enabling employment and business development. It notes that this will be enabled within Harborough District in support of the sub-regional economic growth of Leicester and Leicestershire. It states that it will support the delivery of existing sites with planning permission, while a review of existing employment sites and allocations in the District will be undertaken to confirm a portfolio of sustainable sites, of the right quality to meet any identified shortfalls in future need. A criterion based assessment will be used to review sites including accessibility tests, policy factors, market attractiveness, sustainable development and strategic planning factors.

2.123 Paragraph h) addresses the specific site of *Magna Park*. It states that the policy will 'Protect Magna Park's unique role as a strategic distribution centre (B8 uses / Min unit size 10,000m^2) of national significance and an exemplar of environmental performance. No further phase of development or large scale expansion of the site, beyond the existing development footprint (to be defined in the Allocations DPD) will be supported'. It is seen as meeting a regional, or strategic, rather than local need and the Core Strategy states that:

2.124 'In the context of the evidence studies, against the criteria they set, and taking account of future developments in the road/rail network, travel to work patterns and the type and skill level of logistics jobs compared to local employment needs, there are more suitable locations and sites (both rail and non rail-linked) than Magna Park within the region and sub-region to meet forecast need for strategic distribution to 2026. On the balance of evidence the preferred policy approach to Magna Park seeks to; support the national/regional drive for a

modal shift of freight from road to rail, protect the site's strategic role for distribution, and safeguard its future and that of its businesses, whilst resisting a further Phase 3 of development and containing the site to its existing development footprint.'

2.125 A new Local Plan for Harborough District is currently being prepared in place of an Allocations DPD, and will incorporate a focused review of the Core Strategy. The document will identify areas for development (incl. employment) in the form of strategic allocations.

Hinckley and Bosworth

2.126 The Hinckley and Bosworth borough has a population of approximately 105,000 (Census 2011). In addition to manufacturing, coal mining was important to the local economy with pits at Bagworth, Desford, Merrylees and Nailstone. Both traditional manufacturing and mining have declined but good accessibility to the motorway network particularly around the A5 corridor has lead to the growth of the distribution sector. However, the latter is now seen to be contributing to congestion problems around the A5.

Key Schemes

Hinckley

2.127 Hinckley in south west Leicestershire is the second largest town in the administrative county. It has a strong manufacturing heritage as the centre of the hosiery industry and it is home to Triumph Motorcycles. Road links are good junction 1 of the M69 to the south of the town.

Dodwells Bridge Industrial Park

2.128 Dodwells Bridge Industrial Park to the west of Hinckley town has immediate access to the A5 and thereby the M69 at Junction 1. Tesco's Distribution occupy a 28,800 sq m (310,000 sq ft) warehouse on Dodwells Road and a 18,580 (200,000 sq ft) unit on Brindley Road is occupied by SCA Industrial, a packaging company. Elmsteel Ltd a precision engineering company occupy a 18,040 sqm (194,161 sq ft.) unit on the industrial park.

Logix Park

2.129 Syncreon, a specialised distributor of industrial materials and products, occupy a 35,300 sq m (380,000 sq ft) unit on Logix Park. Logix park, developed by Rosemound Developments in 2006, is located to the south of Hinckley on the A5 with good motorway accessibility. Armstrong Logistics, Aldi's distributors also occupy a unit on the park

Desford Road

2.130 There are two large scale units along the Desford Road on the former Timkin Desford Steel site, located 9.5km west of Leicester and 5km west of J21a of the M1 via the A46. Caterpillar UK Ltd occupy a 18,000 sq m (913,737 sq ft) manufacturing facility and At Crown Crest plc occupy a 74,230 sq m (799,000 sq ft) cash and carry distribution operation.

Hinckley Commercial Park

2.131 Hinckley Commercial Park is situated immediately adjacent to the A5 and is located 1 mile from junction 1 of the M69 motorway which provides access to the national motorway network. The site was acquired by Goodman in 2004 and a £12m infrastructure project was implemented. This provided a new roundabout from the A5, together with a new duelled access into the development In October 2006, Goodman developed a 33,910 sq m (365,000 sq ft) national distribution building for Walsh Western, a unit for Johnsons Apparel Master and a 12,260 sq m (132,000 sq ft) distribution centre for Caterpillar Logistics in 2007. In summer 2013 DPD committed to a 30,660 sq m (330,000 sq ft) parcel hub. Phase II will provide an additional 120 acres of development. DPD stated that the Hinckley site was chosen because of its proximity to motorway links to the whole of the UK, and because there is more scope for future expansion than in Smethwick, where DPD UK has its three other hubs.

2.132 The only consented land in Hinckley is located on Logix Park and there are no second hand large scale distribution units available.

Local Plan Considerations

2.133 The Hinckley and Bosworth Core Strategy, adopted December 2009, proposes 10 hectares for warehousing, focused primarily at/adjacent to Hinckley to support its role as a sub-regional centre, with smaller allocations in the Key Rural Centres to support local employment opportunities. In addition, to ensure the sustainability of the Urban Extensions at Earl Shilton and Barwell there is a need to allocate a further 20- 25 ha of employment land to support the population in these new communities (Leicester and Leicestershire HMA Employment Land Study, 2008). This is provided for in Policies 2 and 3 of the Core Strategy which states that the employment allocations are to provide for industrial and warehousing developments which should primarily support local employment opportunities, including starter and grow-on units.

2.134 Policy 4 covering development in Burbage proposes to allocate land for the development of 10 ha of B8 employment 4 ha of B2 employment land adjacent to the railway line as an extension to Logix Park.

Section 2.4: Summary and Key Messages

2.135 Given their fixed nature and the large capital required to develop them, large scale warehouses (NDCs or RDCs) are 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.

2.136 The important commercial players in the market 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. The need for cost effective logistics strategies will be an important contributory factor to the process of maintaining and enhancing competitive positions.

2.137 The distribution strategy which has been established and adopted by most players in the market over the past 25-30 years is broadly based around NDCs serving a network of RDCs and end users. Under this strategy, the southern part of the East Midlands region (the 'golden triangle) became the preferred location for large scale NDCs due a combination of the following reasons:

- It was broadly central to the major domestic production sites, the deep-sea and Channel ports and RDCs in other regions;
- The release of large competitive sites by local authorities for B8 use during the 1980s which were close junctions on the M1/M6; and
- Historically, relatively low road haulage costs (in turn driven by low fuel costs) and competitive labour rates.

3. CURRENT FREIGHT FLOWS IN LEICESTERSHIRE

3.1 The man aim of this Section of the report was threefold, namely:

- Establishing the current volume of goods delivered in the East Midlands region and Leicestershire sub-region, for both road and rail freight;
- Assessing how these volumes have changed over the recent past; and
- Establishing the current volume of goods delivered directly to distribution centres in the East Midlands region and Leicestershire sub-region.

3.2 The main data source of the analysis has been MDS Transmodal's *GB Freight Model*[5]. Outputs from the GB Freight Model can be divided into different commodity groups. Recognising that strategic distribution sites only handle certain types of cargo, the analysis has consequently focused on those commodities which at some stage in the supply chain will pass through a distribution centre (NDCs and/or RDCs). Commodities such as food, beverages and manufactured goods have been included in the analysis[6]. Goods which are not handled at distribution centres, such as coal, aggregates, metals and waste, were consequently excluded from the analysis.

Section 3.1: Current Road Freight Flows in Leicestershire

3.3 The table below (Table 3.1) estimates the current (2012) volume of goods moved by road transport into, out of and within the East Midlands region and Leicestershire sub-region, for those commodities which at some stage in the supply chain will pass through a warehouse (so called 'distribution centre commodities'). A breakdown by origin and destination regions is also provided, differentiated into 'Leicestershire' and 'Other East Midlands' for the East Midlands region. Maps 3.1 and 3.2 following illustrate these figures for traffic moving to and from the East Midlands region.

3.4 It should be noted that a small proportion of the freight collected or delivered by road transport in Leicestershire/East Midlands will also have been moved by rail freight at some point in the supply chain (e.g. to DIRFT by rail and then by road to Magna Park). Likewise, a small percentage of the freight delivered by road in Leicestershire/East Midlands will subsequently be lifted by rail freight. Rail freight is addressed in Section 3.2 below.

[5] A freight transport model developed by MDS Transmodal, and used for analysing current and forecasting future freight flows to, from and within Great Britain by mode, origin/destination, routing and commodity. It has been audited by the DfT and used to inform a number of their studies, and it was also employed on the East Midlands Strategic Distribution Study (for the former EMDA) to forecast land use requirements going forward. It has recently been used to produce updated rail freight forecasts for Network Rail.

[6] Beverages, Food (fresh, perishable and non-perishable), Furniture, Clothing, Manufactured Articles, Paper and Card (including packaging), Parcels and Wood/Cork Manufactures

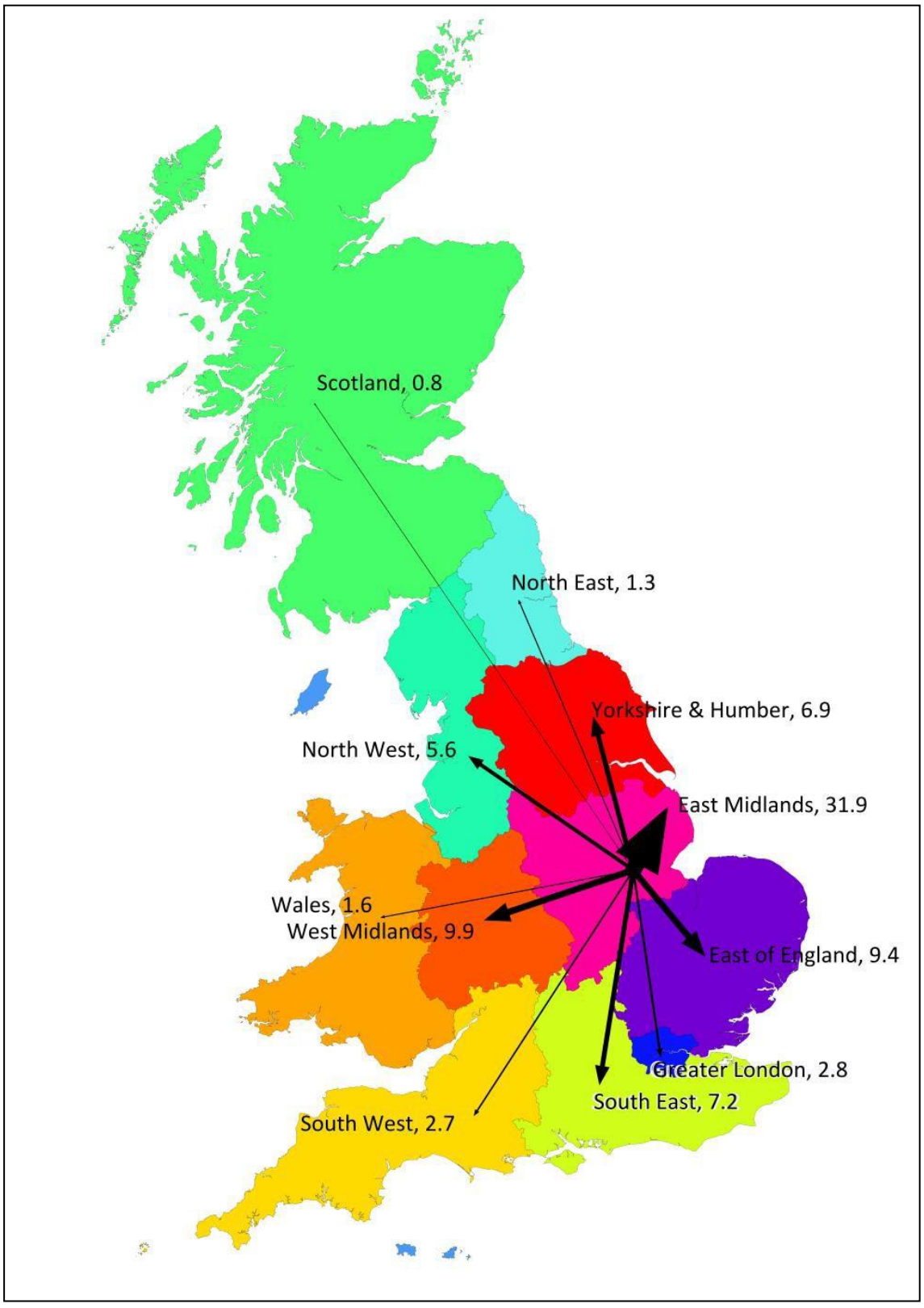
Table 3.1: Total Road Freight Traffic to and from East Midlands by Origin and Destination (2012) – Distribution Centre Commodities

000s tonnes lifted

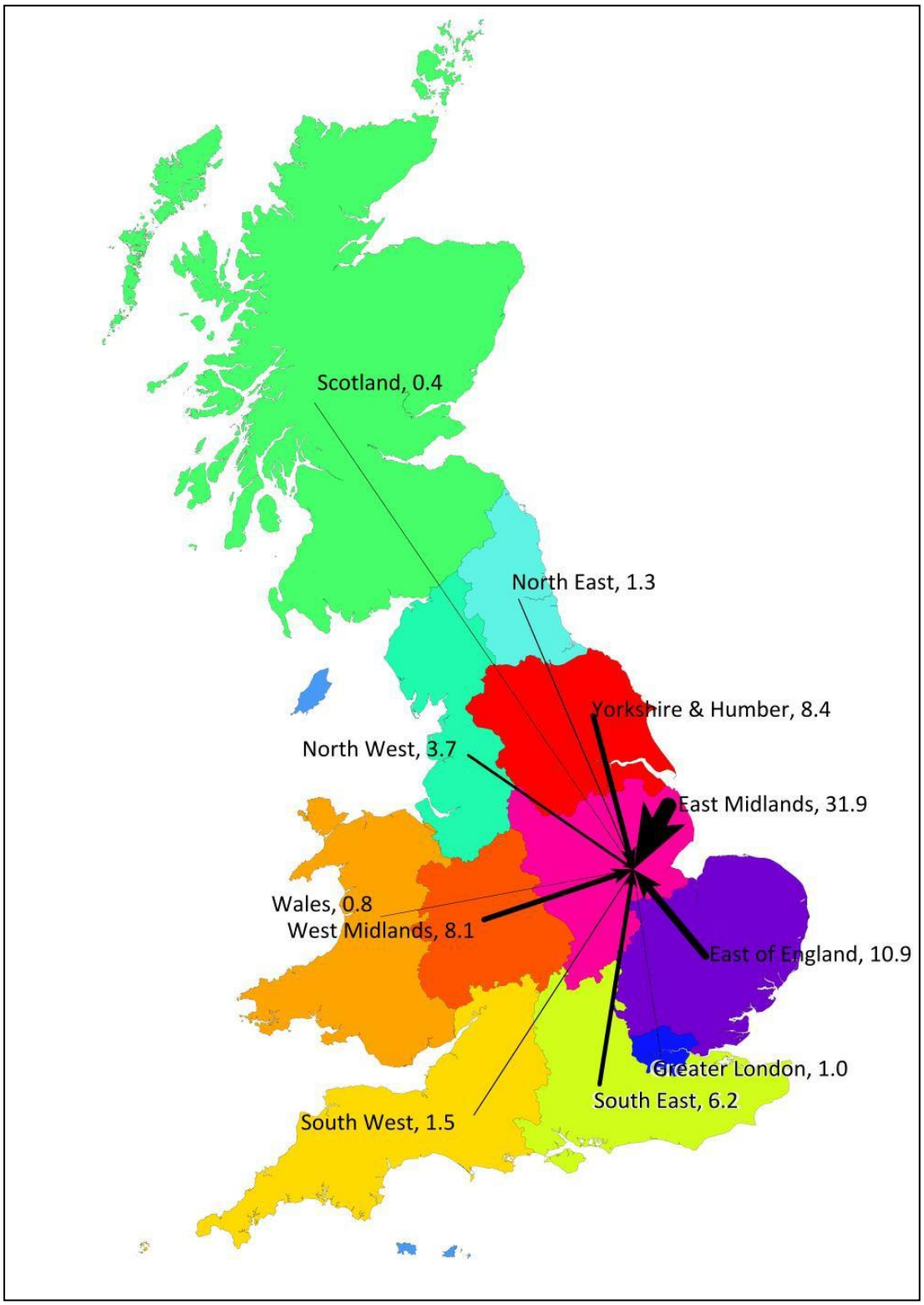
To East Midlands				**From East Midlands**			
	Destination				Origin		
Origin Region	Leicestershire	Other East Midlands	TOTAL	***Destination Region***	Leicestershire	Other East Midlands	TOTAL
Leicestershire	5,403	2,757	8,160	Leicestershire	5,403	2,609	8,011
Other East Midlands	2,609	21,144	23,753	Other East Midlands	2,757	21,144	23,901
East of England	2,177	8,732	10,909	East of England	1,737	7,653	9,390
Greater London	346	676	1,022	Greater London	651	2,144	2,794
North East	308	974	1,282	North East	296	997	1,293
North West	898	2,852	3,749	North West	1,362	4,231	5,594
Scotland	195	248	443	Scotland	138	710	848
South East	1,393	4,814	6,207	South East	1,827	5,336	7,163
South West	392	1,086	1,478	South West	756	1,983	2,738
Wales	182	625	807	Wales	508	1,069	1,577
West Midlands	2,290	5,818	8,109	West Midlands	3,358	6,492	9,850
Yorkshire & Humber	1,979	6,389	8,369	Yorkshire & Humber	2,238	4,667	6,905
TOTAL	**18,171**	**56,116**	**74,287**	**TOTAL**	**21,031**	**59,035**	**80,066**

Source: GB Freight Model

Map 3.1: Road Freight Traffic From East Midlands Region, million tonnes lifted (2012) – Distribution Centre Commodities



Map 3.2: Road Freight Traffic To East Midlands Region, million tonnes lifted (2012) – Distribution Centre Commodities



3.5 In summary, around 74.3 million tonnes of distribution centre commodities were delivered in the East Midlands region (including the Leicestershire sub-region) in 2012. Around 43% of this total had an East Midlands region origin (32 million tonnes). Of the remaining traffic coming into the East Midlands by road, 45% (33.5 million tonnes) is from the neighbouring regions of West Midlands, East of England, Yorkshire/Humber and the South East. Overall, around 95% of all road freight traffic delivered into the region is moving less than 250km. This is the distance above which rail freight becomes cost competitive when one end of the trip is directly rail-served e.g. a port or strategic distribution site such as DIRFT (a road haul consequently being required at the non rail-served end). Rail should always be competitive, except over very short distances, where both ends of the trip are directly rail-served e.g. between a port and rail-served strategic distribution site. The development of rail-served strategic distribution sites is therefore an essential component in delivering modal shift from road to rail (a key public policy objective on sustainability grounds), as it greatly reduces the distance over which rail can offer a competitive solution. Conversely, planning for road-only connected strategic distribution sites will have a marginal impact on modal shift.

3.6 In the opposite direction, around 80.1 million tonnes of distribution centre commodities were collected in the East Midlands region (including the Leicestershire sub-region) in 2012. Around 40% of this total subsequently had an East Midlands destination (32 million tonnes). The fact that road freight traffic collected in the region is greater than the volume delivered reflects the important manufacturing base in the East Midlands, particularly food production (what goes into a warehouse subsequently leaves shortly after, the additional traffic being that produced in the East Midlands).

3.7 As per inbound traffic, most cargo leaving the region by road is travelling to the neighbouring regions. It is worth noting the relatively small proportion of freight delivered to London given the size of the Capital's economy, particularly when compared with metropolitan areas in other regions (West Midlands, North West and Yorkshire). Also, volumes delivered to the East of England and the South East are significant and larger than that delivered to Greater London. This reflects the fact that most RDCs serving London are located in the East of England/South East rather than in London itself. Given the high proportion of NDC floor space in the East Midlands and the structure of supply chains outlined in Section 2, the volumes subsequently delivered to each regional broadly reflect the warehouse floor space in those regions (see Section 4) along with the population and consumption in those regions.

3.8 The table below estimates, for distribution centre commodities, the current (2012) volumes of goods moved by road transport to the East Midlands region and Leicestershire sub-region, differentiating by whether their origin is domestic or international.

Table 3.2: Road Freight Traffic Delivered to East Midlands by Domestic/International (2012) – Distribution Centre Commodities

	000s tonnes lifted		
	Destination		
	Leicestershire	Other East Midlands	TOTAL
Domestic	16,782	51,499	68,281
Imports - LoLo	940	675	1,614
Imports - RoRo	182	3,541	3,723
Imports - other	267	401	668
TOTAL	18,171	56,116	74,287

Source: GB Freight Model

3.9 A similar analysis has been undertaken for the West Midlands region, and these figures have been subsequently combined to produce a 'grand total' for the two regions which are generally accepted to incorporate the golden triangle (as described in Section 2). These are shown in the tables below.

Table 3.3: Total Road Freight Traffic to and from West Midlands by Origin and Destination (2012) – Distribution Centre Commodities

	000s tonnes lifted			
To West Midlands			**From West Midlands**	
Origin Region	**Total**		***Destination Region***	**Total**
East of England	5,328		East of England	5,165
Greater London	2,370		Greater London	1,593
Leicestershire	2,290		Leicestershire	3,358
Other East Midlands	5,818		Other East Midlands	6,492
North East	740		North East	726
North West	6,032		North West	7,139
Scotland	740		Scotland	384
South East	6,226		South East	6,437
South West	4,243		South West	3,878
Wales	2,443		Wales	2,090
West Midlands	30,899		West Midlands	30,899
Yorkshire & the Humber	3,047		Yorkshire & the Humber	4,272
Total	**70,177**		**Total**	**72,432**

Source: GB Freight Model

Table 3.4: Total Road Freight Traffic to and from East and West Midlands Combined by Origin and Destination (2012) – Distribution Centre Commodities

000s tonnes lifted			
To East and West Midlands		**From East and West Midlands**	
Origin Region	**Total**	***Destination Region***	**Total**
East and West Midlands	80,770	East and West Midlands	80,770
Eastern	16,074	Eastern	14,718
Greater London	2,615	Greater London	5,165
North East	2,008	North East	2,034
North West	10,888	North West	11,626
Scotland	827	Scotland	1,588
South East	12,644	South East	13,389
South West	5,356	South West	6,981
Wales	2,896	Wales	4,020
Yorkshire & the Humber	12,641	Yorkshire & the Humber	9,952
Total	**146,718**	**Total**	**150,243**

Source: GB Freight Model

3.10 Data from previous years which is directly comparable with the analysis presented above are not available. However, the publication *Road Freight Statistics 2005* (which as per the GB Freight Model derives its data from the Continuing Survey of Road Goods Transport[7]) provides a region-region analysis for all commodities lifted by road transport, thereby allowing a broad comparison between 2005 and 2012 to be undertaken. This is shown in the table below.

Table 3.5: Total Road Freight Traffic East Midlands 2005 and 2012

	Millions tonnes lifted		
	2005	2012	% change
From East Midlands	179	163	-9.8%
To East Midlands	168	151	-11.3%

Source: Road Freight Statistics 2005 and GB Freight Model

3.11 These figures are reflected nationally. The fall in cargo lifted by road transport can be explained by two factors, namely:

- A general decline in demand for commodities due to the economic downturn; and
- Modal shift to rail freight, particularly for deep-sea maritime containers and long distance flows of consumer goods from the Midlands to Scotland (see below).

Section 3.2: Current Rail Freight Flows in Leicestershire

3.12 A similar analysis to that above has been undertaken for rail freight. As per road traffic, the GB Freight Model provides outputs by commodities and traffic type. The analysis has therefore focused on intermodal rail freight i.e. deep-sea maritime containers and other unit loads, where the cargo conveyed will be passing through a distribution centre at some stage in the supply chain. Bulk traffics are consequently excluded. The table below presents a summary of the analysis.

[7] An on-going sample survey of goods vehicle operators, conducted by the DfT, which is used to estimate the volume of goods moved and lifted by HGVs annually.

Table 3.6: Intermodal Rail Freight Traffic to and from East Midlands (2012)

000s tonnes lifted			
To East Midlands		**From East Midlands**	
Origin		***Destination***	
Channel Tunnel	69	Channel Tunnel	64
East Midlands	1	East Midlands	1
East of England	202	East of England	139
Greater London	78	Greater London	63
Scotland	647	North West	0
South East	70	Scotland	790
Wales	31	South East	72
		Wales	84
TOTAL	**1,097**		
		TOTAL	**1,213**
Type		***Type***	
Channel Tunnel	69	Channel Tunnel	64
Import from Port	271	Export to Port	211
Domestic	757	Domestic	939
TOTAL	**1,097**	**TOTAL**	**1,213**

Source: GB Freight Model

3.13 Approximately 1.2 million tonnes of intermodal rail freight was collected in the region in 2012, mainly deep-sea container traffic and domestic flows to RDCs in Scotland from NDCs in the East Midlands. Around 1.1 million tonnes of intermodal rail freight was delivered into the East Midlands in 2012, again mainly from the deep-sea ports and cargo from Scotland. For domestic intermodal, given that the primary flow is from the Midlands to Scotland (i.e. the trains are essentially commissioned by the retailers to move cargo from the Midlands into Scotland), the large flows coming south suggest that the operators are also securing significant backload traffic from Scottish producers.

3.14 As indicated earlier, rail freight delivered in Leicestershire/East Midlands will subsequently be re-delivered by road transport (predominantly to strategic warehousing, see Section 3.3 below). Likewise, freight collected by rail in Leicestershire/East Midlands will have previously be lifted by road transport.

3.15 As per the road freight traffics, a similar analysis has been undertaken for the West Midlands region, and these figures have been subsequently combined to produce a 'grand total' for the two regions which are generally accepted to accommodate the golden triangle (as described in Section 2). These are shown in the tables below.

Table 3.7: Unit Load Rail Freight Traffic to and from West Midlands (2012)

	000s tonnes lifted			
To West Midlands			**From West Midlands**	
Channel Tunnel	96		Channel Tunnel	50
Import from Port	2,343		Export to Port	2,322
Domestic	52		Domestic	40
TOTAL	**2,491**		**TOTAL**	**2,412**

Source: GB Freight Model

Table 3.8: Unit Load Rail Freight Traffic to and from East and West Midlands (2012)

	000s tonnes lifted			
To East and West Midlands			**From East and West Midlands**	
Channel Tunnel	165		Channel Tunnel	114
Import from Port	2,614		Export to Port	2,533
Domestic	810		Domestic	979
TOTAL	**3,589**		**TOTAL**	**3,626**

Source: GB Freight Model

3.16 Directly comparable national rail freight data goes back to the financial year 2004/5. This is shown in the table below for all rail freight traffics and the intermodal sector.

Table 3.7: National Rail Freight Traffics 2004/5 and 2011/12

	Millions tonnes lifted		
	2004/5	2011/12	Indicative CAGR %
Total Rail Freight	**115.4**	**111.3**	**-0.5%**
of which:			
Intermodal - Ports/Ch Tunnel	11.6	15.7	4.5%
Intermodal - domestic	2.0	2.7	4.3%
of which:			
FMCG	*1.3*	*2.2*	*8.8%*

Source: Network Rail Freight Market Study
CAGR: Compound Annual Growth Rate
FMCG: Fast Moving Consumer Goods

3.17 Nationally, rail freight traffics have declined marginally. However, this fall masks significant gains by the intermodal sector. As alluded to above, these trends reflect two important factors, namely:

- A general decline in demand for commodities due to the economic downturn. In the case of rail freight, this particularly effected the metals and construction materials sectors; and
- Modal shift to rail freight, particularly for deep-sea maritime containers and long distance FMCG flows from the Midlands to Scotland (domestic intermodal). In a declining market overall, intermodal rail freight has been growing at around 4.5% annually on a compound basis over the same time period, implying modal shift and growing market share for rail. One of the key factors driving this growth has been the continued development of large scale warehouse floor capacity on directly rail-served sites e.g. DIRFT or Hams Hall.

Section 3.3: Freight Flows to Distribution Centres in Leicestershire

3.18 The above data, however, does not establish the volume of goods which are delivered directly to distribution centres in the East Midlands and Leicestershire sub-region. 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. For example, one tonne of cargo transferred from a port to NDC to RDC to retail outlet would be recorded

as 3 tonnes in the CSRGT. The total volume of road freight delivered in the East Midlands, as described in the table above, is therefore sum of all cargo delivered into factories, NDCs, RDCs and retail outlets.

3.19 In order to establish the current volume of unitised goods being delivered directly to distribution centres in the region, a further 'filter' has to be applied to the current road traffic flow data to eliminate this double/triple counting. Analysis undertaken by MDS Transmodal/Savills for the *East Midlands Strategic Distribution* in 2006 (for the former East Midlands Development Agency) concluded 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). Using this figure for domestic road freight, and also assuming that 100% of imported road traffic and rail freight is delivered direct to a distribution centre (given the nature of this traffic, it is reasonable to assume that 100% of these flows will be direct to a distribution centre), the total volume of cargo that is delivered direct to a distribution centre in the East Midlands region and Leicestershire sub-region can be estimated. This is undertaken in the table below.

Table 3.4: Estimated Volume of Cargo Delivered Direct to Distribution Centres in East Midlands and Leicestershire (2012)

	000s tonnes		
	Destination		
	Leicestershire	Other East Midlands	Total
Domestic HGV traffic	7,552	23,175	30,727
Imports by HGV	1,389	4,617	6,005
Rail freight		1,097	1,097
Total	**8,940**	**28,889**	**37,829**

Source: GB Freight Model and Consultant's estimates

3.20 On this basis, 37.8 million tonnes of cargo is currently delivered direct to distribution centres in the East Midlands region. As a 'sense check', these volumes have been related to the current quantum of large scale distribution centre floor space in the region (see Section 4 below). This suggests that the East Midlands region hosts *8.056 million square metres* of floor space. Assuming that, on average, 85% of total floor space is utilised at any one time (the 'buffer space' is used for peak periods), this suggests that each square metre of floor space handles around 5.5 tonnes of cargo per annum. This is consistent with what we would expect at NDCs (stock holding role) and implies average dwell times of around 5-6 weeks.

Section 3.4: Summary and Key Messages

3.21 Around 74.3 million tonnes of distribution centre commodities were delivered in the East Midlands region (including the Leicestershire sub-region) by road transport in 2012. Around 43% of this total had an East Midlands region origin, with around 45% coming into the East Midlands from the neighbouring regions of West Midlands, East of England, Yorkshire/Humber and the South East. Around 95% of all road freight traffic delivered into the region is therefore moving less than 250km, this being the distance above which rail freight becomes cost competitive when one end of the trip is directly rail-served. Rail should always be competitive, except over very short distances, where both ends of the trip are directly rail-served. The development of rail-served strategic distribution sites is therefore an essential component in delivering modal shift from road to rail (a key public policy objective on sustainability grounds), as it greatly reduces the distance over which rail can offer a competitive transport solution. Conversely, planning for road-only connected strategic distribution sites will have a marginal impact on modal shift.

3.22 Around 80.1 million tonnes of distribution centre commodities were collected in the East Midlands region in 2012. The fact that road freight traffic collected in the region is greater than the volume delivered reflects the important manufacturing base in the East Midlands, particularly food production.

3.23 The volume of cargo lifted by road freight in the East Midlands since 2005 has declined by around 10%. This is explained by a general decline in demand for commodities due to the economic downturn and modal shift to rail freight, particularly for deep-sea maritime containers and long distance flows of consumer goods from the Midlands to Scotland (see below).

3.24 Approximately 1.2 million tonnes of intermodal rail freight was collected in the region in 2012, mainly deep-sea container traffic and domestic flows to RDCs in Scotland from NDCs in the East Midlands. Around 1.2 million tonnes of intermodal rail freight was delivered into the East Midlands in 2012, again mainly from the deep-sea ports and cargo from Scotland.

3.25 Nationally, rail freight traffics have declined marginally since 2005 (principally due to a fall in demand for metals and construction materials). However, this fall masks significant gains by the intermodal sector, which has been growing at around 4.5% annually on a compound basis over the same time period. These trends reflect two important factors, namely:

- A general decline in demand for commodities due to the economic downturn; and
- Modal shift to rail freight, particularly for deep-sea maritime containers and long distance FMCG flows from the Midlands to Scotland (domestic intermodal). In a declining market

overall, intermodal rail freight, implying modal shift and growing market share for rail. One of the key factors driving this growth has been the growth of large scale warehouse floor capacity on directly rail-served sites.

3.26 Around 37.8 million tonnes of cargo is currently delivered direct to distribution centres in the East Midlands region.

4. EXISTING SUPPLY OF LARGE SCALE WAREHOUSING IN LEICESTERSHIRE

4.1 Section 2.3 above provided an overview of the logistics sector in Leicestershire, including areas in the county associated with strategic distribution and details of some of the key sites/schemes, warehouses (inc floor space) and occupiers. The main aim of this section has been to establish the quantum of existing large scale warehouse floor space capacity in the region and Leicestershire (along with undertaking a national comparison) and where this capacity is currently located. This is for three reasons:

- It provides an indication of the region's current position nationally in the strategic distribution sector;
- There is a need to quantify the total existing large scale warehouse floor space capacity in the region/Leicestershire, as this is an important baseline figure which will feed into the forecasting assessment in Part B; and
- It allow the past locational decisions made by the market to be identified.

4.2 The *Valuation Office Agency (VOA)* records the amount of floor space by function within individual commercial properties across England and Wales for Business Rates purposes (non-domestic ratings list). This data is available via the VOA's website showing, for individual properties, their location and amount of floor space by function (e.g. warehousing). MDS Transmodal has interrogated this on-line facility and subsequently generated a *database* of all large scale warehouses by floor space size, location and occupier for England and Wales. A large scale warehouse is defined as an individual unit over 9,000 square metres or approximately 100,000 sq ft; this being the standard recognised definition within the commercial property sector. Across England and Wales, a total of 2,049 buildings covering *39.8 million square metres* of floor space can be identified. A breakdown of these figures by Government Office Region are presented in the table below, also showing the mean floor space per unit.

Table 4.1: 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)
East Midlands	*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)**	
East Midlands	*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

4.3 The table shows that 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. It is important to note that whilst East Midlands region records around 8% of the population of England and Wales, it accommodates 20% of total English and Welsh warehouse capacity. The mean size per unit is also significantly above the national figure. 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. The data presented above consequently demonstrates 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. The above analysis would suggest that around 65-70% of the region's floor space is playing a national rather than regional role.

4.4 This high concentration of floor space in the East Midlands region can be explained by reference to the distribution strategy which has been established and adopted over the past 25-30 years by most large players in the logistics market. This was undertaken in Section 2 which described the differing functions of large scale warehouse units (i.e. NDCs and RDCs), the flows of cargo into and between each type of facility and why the southern part of the East Midlands region became the preferred location for large scale NDCs. The above described figures demonstrates this position clearly. The fact that the mean size per unit is also significantly above the national figure further demonstrate the 'national' role played by warehousing in the East Midlands. As discussed in Section 2, NDCs are predominantly undertaking a stock-holding role, and consequently more floor space is required to undertake this function when compared with RDCs where dwell times are much shorter.

4.5 In contrast, the preferred location for large scale RDCs is close to the main conurbations of Britain, as this is where the main end-delivery points are located. This position is reflected in the table above, which shows significant concentrations of floor space in the North West (Manchester, Liverpool), the West Midlands (Birmingham), Yorkshire (Leeds, Sheffield) and the South East, East of England and London. The fact that the mean size per unit in these regions is closer to the national average demonstrates a higher proportion of RDC floor space in these regions.

4.6 The table below describes the current supply of large scale warehousing in the East Midlands region by county, alongside similar data for the neighbouring regions of West Midlands, East of England and Yorkshire/Humber along with the Milton Keynes unitary authority.

Table 4.2: Current Large Scale Warehouse Capacity in East Midlands, West Midlands, Yorkshire, East of England and Milton Keynes

Region/County	Floor Space (000s sq m)	Number Warehouse Units	Mean size per unit (sq m)
East Midlands			
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**
Yorks/Humber			
West Yorkshire	2,457	133	18,474
South Yorkshire	1,778	69	25,766
East Yorks/N Lincs	1,196	70	17,086
North Yorkshire	579	30	19,289
Total	**6,010**	**302**	**19,900**
West Midlands			
Staffordshire	2,880	126	22,858
West Midlands	1,876	119	15,767
Warwickshire	692	30	23,060
Hereford & Worcester	475	31	15,324
Shropshire	210	11	19,088
Total	**6,133**	**317**	**19,347**
East of England			
Bedfordshire	516	17	30,324
Cambridgeshire	972	45	21,593
Essex	952	47	20,265
Hertfordshire	806	44	18,320
Norfolk	310	20	15,492
Suffolk	432	26	16,623
Total	**3,988**	**199**	**20,039**
Milton Keynes			
Total	**742**	**36**	**57,097**

Source: Source: MDS Transmodal Warehouse Database (derived from VOA business ratings data) as at January 2014.
NB Data does not include East Midlands Distribution Centre at Castle Donington, which has become operational since the data was compiled.

4.7 The table shows that around 72% of East Midlands floor space capacity is located in Northamptonshire or Leicestershire. In Leicestershire itself, around 2.25 million square metres of floor space across 89 warehouse units are identified. There are also substantial concentrations of warehousing in neighbouring authorities such as Milton Keynes. The table below shows the current supply of large scale warehousing in Leicestershire and Northamptonshire by Postcode Area. This data is also reflected in Map 4.1 following.

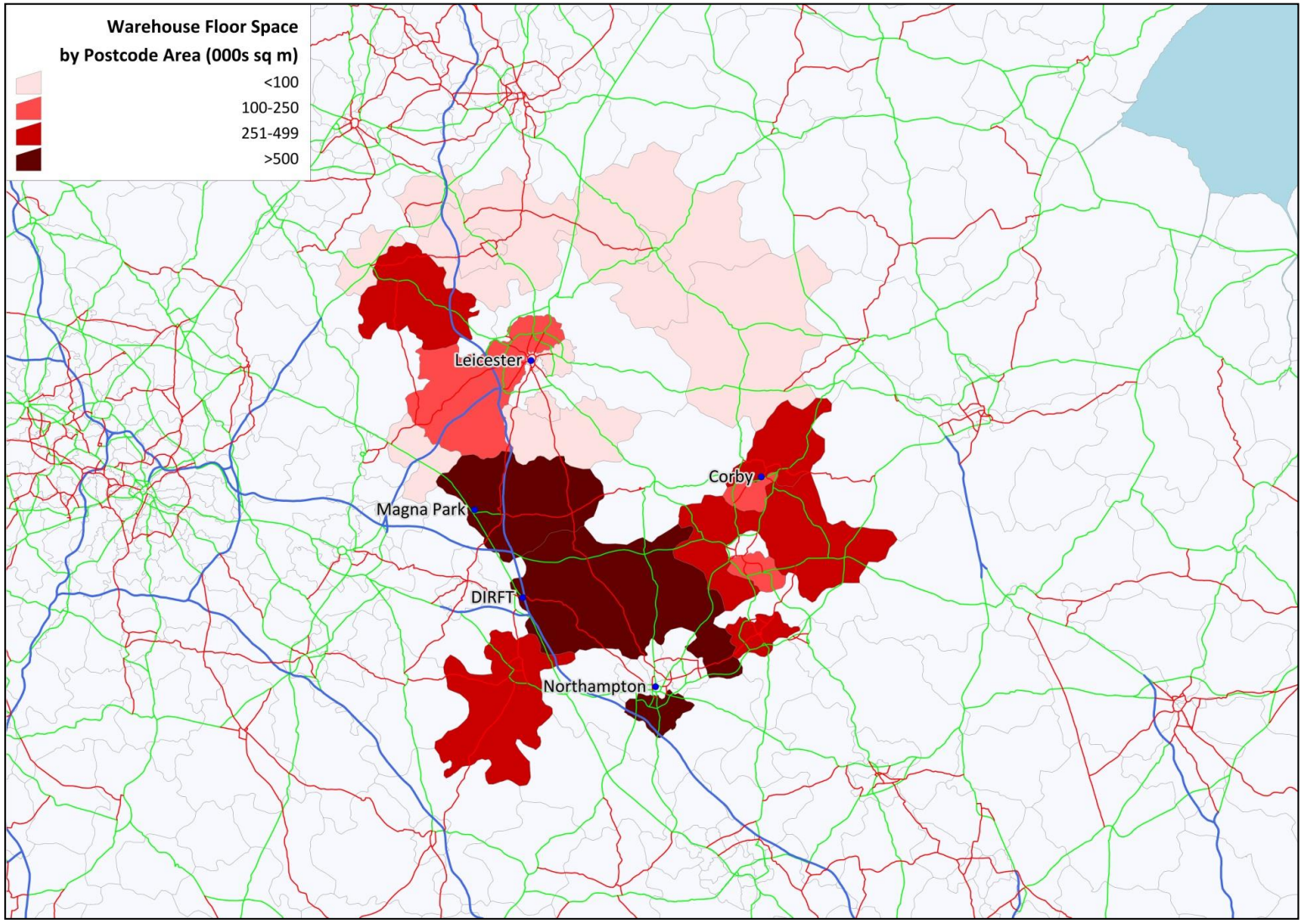
Table 4.3: Current Large Scale Warehouse in Leicestershire and Northamptonshire by Postcode Area

Postcode Area	Location	Floor Space (000s sq m)	Number Warehouse Units
LE17	Lutterworth (Magna Park)	1,001	33
LE67	Coalville	287	13
LE3	Leicester	204	9
LE9	Leicester	177	2
LE4	Leicester	104	5
LE10	Hinckley	83	4
LE12	Loughborough	51	2
LE65	Ashby	51	3
LE15	Oakham	51	3
LE8	Leicester	41	3
LE13	Melton	41	1
LE19	Narborough/Leicester	40	3
LE18	Wigston/Leicester	28	1
LE5	Leicester	24	1
LE1	Leicester	22	2
LE14	Melton	21	2
DE74	Kegworth/Castle Don	13	1
LE11	Loughborough	12	1
Total Leicestershire		**2,250**	**89**
NN4	Northampton	1,035	37
NN6	Crick (DIRFT)	520	19
NN11	Daventry	392	13
NN17	Corby	332	13
NN14	Kettering	309	9
NN8	Wellingborough	290	10
NN18	Corby	161	8
NN15	Kettering	104	2
Other NN		403	23
Total Northants		**3,545**	**134**

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

NB: Warehouse capacity presented by Postcode Area and not by local government/planning authority. The location indicated in the table above is therefore the main urban area covered by the particular Postcode Area (and not local government), noting that they can straddle multiple urban areas.

Map 4.1


Warehouse Floor Space
by Postcode Area (000s sq m)
<100
100-250
251-499
>500
Leicester
Corby
Magna Park
DIRFT
Northampton

4.8 Within Leicestershire, the main concentrations of warehousing are around Lutterworth (Magna Park), Leicester and Coalville. In Northamptonshire, the largest concentrations of large scale floor space are around Northampton and Crick (DIRFT Strategic Rail Freight Interchange). However, a sizeable amount of floor space is also identified around Corby, Kettering and Wellingborough i.e. along the A14 corridor to the east of what is commonly regarded as the golden triangle.

4.9 With respect to *rail-served floor space*, the data indicates that around 520,000 sq metres of existing floor space capacity assessed above is located on a directly rail-served site (DIRFT SRFI). This represents around 6.5% of existing regional capacity.

4.10 While the mean size per unit in Leicestershire is just over 25,000 square metres (and around 26,500 square metres in neighbouring Northants), the floor space in the largest units is considerably larger. In fact, there is a great deal of evidence to suggest that many distributors, driven by modern ICT, stock control and automated handling systems, have been gaining economies of scale by developing very large warehouse units, which in most cases have replaced two or more smaller distribution centres. This is reflected in the table below, which shows that there are 17 units in Leicestershire and neighbouring Northamptonshire which are larger than 50,000 square metres.

Table 4.4: Warehouses in Leicestershire and Northamptonshire over 50,000 square metres

Warehouse Address		Postcode	County	Floor Space (sq m)
Plot 5320/5420, Hawke Way	Magna Park	LE17 4XN	Leicestershire	111,349
Plot 5410, Hunter Boulevard	Magna Park	LE17 4XN	Leicestershire	103,075
Peckleton Lane	Desford	LE9 9JT	Leicestershire	102,781
Sunningdale Road	Leicester	LE3 1UX	Leicestershire	99,020
Liliput Road	Northampton	NN4 7EY	Northamptonshire	89,868
Plot 1400, Hunter Boulevard	Magna Park	LE17 4XN	Leicestershire	83,602
Gowerton Road	Northampton	NN4 8PJ	Northamptonshire	78,254
Desford Road	Kirby Muxloe	LE9 2BJ	Leicestershire	74,191
Huntingdon Road	Thrapston	NN14 4NJ	Northamptonshire	72,984
Plot 1, North Kettering Business Park	Glendon Road	NN14 1QF	Northamptonshire	72,984
Lammas Road	Corby	NN17 5JF	Northamptonshire	72,452
1, Saxon Drive	DIRFT	NN6 7EA	Northamptonshire	70,714
Altendiez Way	Burton Latimer	NN15 5YZ	Northamptonshire	67,893
Royal Oak Way North	Daventry	NN11 8PQ	Northamptonshire	66,747
Beveridge Lane	Bardon Hill	LE67 1TB	Leicestershire	60,829
Nectar Way	Swan Valley	NN4 9BX	Northamptonshire	60,829
Unit 3, 15/23 Claudius Way	Victoria Business Park	NN8 2DH	Northamptonshire	51,844

Source: Source: MDS Transmodal Warehouse Database (derived from VOA business ratings data) as at January 2014.
NB Data does not include East Midlands Distribution Centre at Castle Donington, which has become operational since the data was compiled.

Summary and Key Messages

4.11 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.

4.12 Whilst the East Midlands region records around 8% of the population of England and Wales, it accommodates 20% of total English and Welsh warehouse capacity. The region has attracted a quantum of warehouse floor space significantly above that which is required to handle the volume of cargo distributed into the East Midlands regional economy. The above analysis would suggest that around 65-70% of the region's floor space is playing a national rather than regional role. As noted earlier, the southern part of the East Midlands region became the preferred location for large scale NDCs, as these figures demonstrate this position.

4.13 72% of East Midlands floor space capacity is located in Northamptonshire or Leicestershire. In Leicestershire itself, around 2.25 million square metres of floor space across 89 warehouse units are identified. Within Leicestershire, the main concentrations of warehousing are around Lutterworth (Magna Park), Leicester and Coalville. In Northamptonshire, the largest concentrations of large scale floor space are around Northampton and Crick (DIRFT Strategic Rail Freight Interchange). However, a sizeable amount of floor space is also identified around Corby, Kettering and Wellingborough i.e. along the A14 corridor to the east of what is commonly regarded as the golden triangle.

4.14 Around 520,000 sq metres of existing floor space capacity (6.5% of regional total) is located on a directly rail-served site (DIRFT SRFI).

5. KEY LOCATIONAL CHARACTERISTICS

5.1 New strategic logistics sites developed in the Leicestershire sub-region must be commercially attractive to the logistics market. The provision of commercially attractive sites will play a key role in meeting the future needs of the logistics market, while at the same time maintain and enhance the identified competitive position of the East Midlands in the logistics sector.

5.2 Commercially attractive strategic logistics sites are considered to be ones which meet the following criteria:

- Good connections with the strategic highway network;
- 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.

Good Strategic Highway Connections

5.3 Road transport will remain the dominant mode, as for most goods flows it will remain the most feasible and cost effective form of transport. This means that the majority of cargo arriving and departing distribution centres located on rail-connected logistics sites will be by road transport. At a rail-served logistics site comprising around 400,000 square metres of floor space serving a national hinterland, even where rail freight services work to their full potential approximately 1,800 inbound and outbound HGV trips per day can be expected (including intermodal units arriving/departing by rail but serving shippers and distribution activities located off site by road)[8].

5.4 For this reason, a commercially attractive strategic logistics site and intermodal terminal facilities must have good access to the highway network. This effectively means being

[8] Broadly similar levels would be expected at a road-only site. At a rail-served site, road based traffic to/from the warehousing is lower compared with a road only site (i.e. balance being by rail) albeit that there will also be intermodal units arriving/departing by rail but serving shippers and distribution activities located off site by road.

located adjacent to a junction on the motorway or long-distance dual carriageway network (e.g. A14), or within a few kilometres of such a junction via a highway capable of accommodating significant volumes of HGV traffic.

Appropriately Located Relative to Markets

5.5 This criteria is essentially self-explanatory - it is important that strategic logistics sites are well located relative to their intended markets. This enables the efficient and sustainable operation of inbound and outbound transport services.

5.6 As noted in Section 2, sites intending to serve regional markets (i.e. RDCs) will need to be located close to the main conurbations of Britain, in order to minimise re-distribution transport costs. This is where the main end-delivery points are located (normally retail outlets), and being in such a location allows the efficient operation of HGV equipment. Logistics operators will seek to achieve (on average) at least two delivery trips within a driver's shift (effectively four delivery trips per day per HGV given night time operation).

5.7 Developments serving a national market (i.e. NDCs) generally require a central location in relation to the main origins and destinations of cargo, which normally means the deep sea container ports and Channel ports and RDCs in most other regions. This offers the ability to round-trip a HGV within a driver's shift limit. In the case of rail-served sites, this means being located on a railway route which has the ability to receive/despatch full length trains direct to the deep-sea container ports, the Channel Tunnel, the north of England and Scotland, without the need to use long circuitous routes.

Modal Choice

5.8 The ability to access reliable and cost competitive rail freight services is becoming a key commercial requirement of the logistics industry, particularly distribution into and out of large scale NDCs. While such modal shift is acknowledged to generate wider environmental or sustainability benefits, the main driving factor for distributors is the financial benefits which can be derived. The development of competitive rail-linked strategic distribution sites is a crucial component in meeting this requirement. Further, the development of such sites will play a crucial role in maintaining and enhancing the region/sub-region's identified competitive position in this sector.

5.9 Road haulage is the dominant mode of transport for consumer type cargo passing through large scale distribution centres. The road haulage industry has, to date, provided the cost efficiency, quality and flexibility required by the logistics market, primarily as a result of road haulage being an open, competitive private sector industry. The relative cost of transporting

goods by road, however, has been increasing, and this trend is likely to continue over the medium to long term. This is due to a combination of EU/Government policy initiatives and other factors such as rising fuel prices and network congestion. In the longer term, distance based road charging, which takes into account wider environmental costs, and other forms of 'emissions charges' may further erode the competitive position of the road haulage sector.

5.10 As a result, distributors of general consumer type cargo are seeking more cost effective transport solutions over the medium/long term in order to remain competitive. On a practical basis, this means logistics operators continuing to use road haulage as the main mode of transport, as it will remain the most practical and cost effective form of transport for most flows of goods, but with the ability to utilise other modes when it provides a more practical and cost effective option i.e. modal choice. In most cases this means rail freight services, and as a result the logistics market is demanding/requiring greater access to reliable and cost competitive rail freight services, and this demand/requirement is likely to grow over the medium to long term.

5.11 Evidence for this is provided by a number of sources. Firstly, the maritime container sector has seen large growth rates over the past decade in the use of rail, particularly on flows from the deep sea ports to the English Midlands and north of England (as described in Section 3 above). Secondly, a number of major retailers have begun to contract rail services to transfer goods from their warehouses in the Midlands to their Scottish distribution centres e.g. Asda and Tesco. Sainsbury's have recently opted to build a new NDC at DIRFT, taking advantage of the site's rail terminal (as described in Section 3 above).

5.12 Locating strategic distribution activity at rail-served sites allows cargo to be loaded or discharged directly from railway wagons without the need to use any intermediate road transport. Given the ability to assemble a full-length train, rail freight costs on a per kilometre basis are lower than road transport costs. Where the origin or destination is not rail-served, a road haul via the public highway network is required to transfer cargo to/from a suitable rail terminal. This additional transport leg (and handling) adds costs into the supply chain, thereby rendering rail more expensive when compared with road transport operating directly from origin to destination (except for long distance flows).

5.13 Consequently, where cargo flows are from a rail connected origin e.g. deep-sea container port to a rail-connected distribution centre (no road hauls), rail freight generally is always cost competitive compared with road transport over any distance given adequate volume to fill a daily full-length train. However, where one end of the trip is not rail-served, e.g. deep-sea container port to a non rail-connected distribution centre (and therefore requiring a road haul from a suitable rail terminal), rail freight generally becomes cost competitive with road transport at distances over 250km. Where both ends are non rail-served (i.e. a road haul is required at both ends of the journey), rail freight generally becomes cost competitive at distances over 400km.

5.14 However, being located alongside the railway network is only part of the equation, and there are a number of other rail connectivity issues to consider which will impact on the competitiveness and viability of individual sites. Essentially not all sites with a rail connection will be appropriate i.e. competitive. Commercially attractive rail-linked strategic logistics sites will be those where the adjoining railway line:

- Offers a generous loading gauge;
- Has available freight train capacity; and
- Connects to key origins/destinations directly without the requirement to use long circuitous routes.

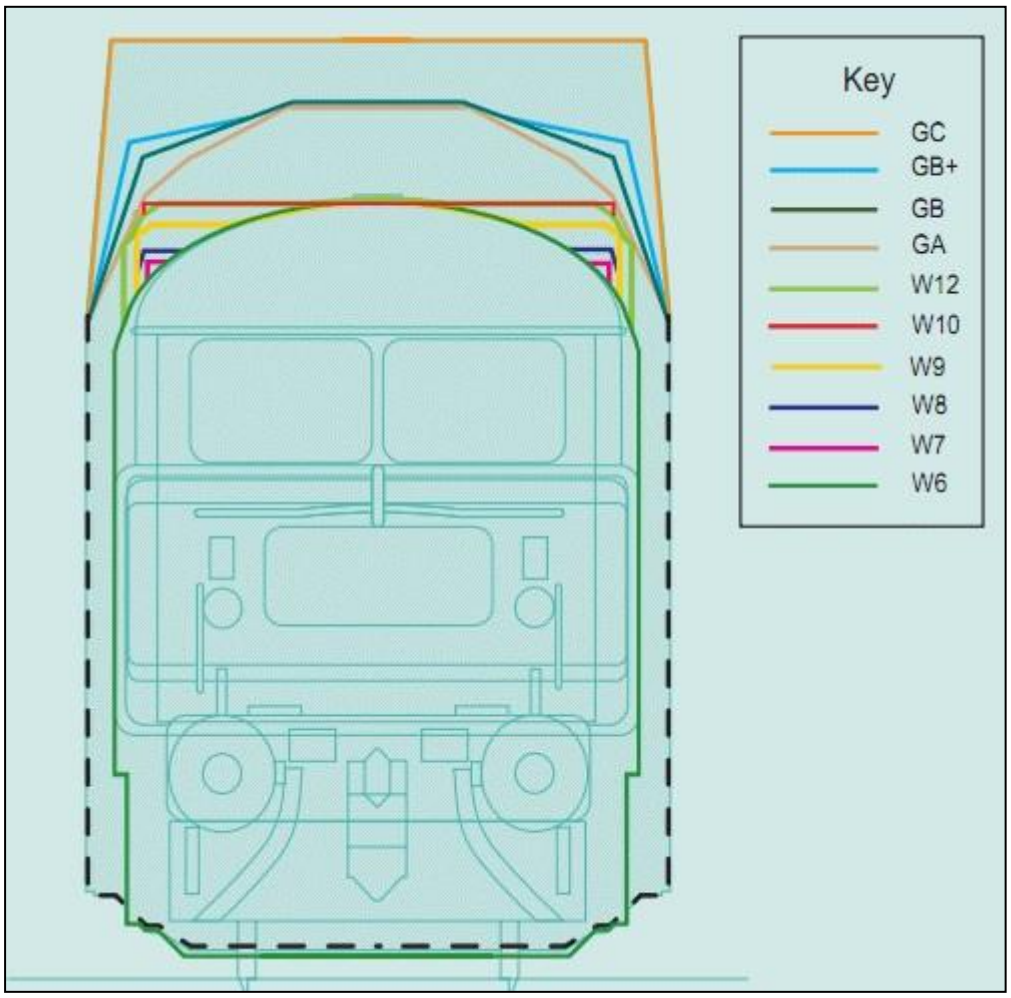
5.15 The physical definition of the maximum height and width in cross section of a railway line is called its *loading gauge*. The size of the loading gauge of a particular section of track will determine the size of rail freight wagon (or combination of intermodal platform wagon plus intermodal unit) that can be conveyed on that section of line. The size of the loading gauge is determined by lineside features such as overbridges, tunnels, overhead power lines, signal gantries and platform edges. The physical dimensions of a rail freight wagon or intermodal wagon/intermodal unit combination must be within the loading gauge profile to ensure that it will not collide with any of these lineside features. Obviously the higher the bridges and tunnels etc. the larger the freight wagon that can be conveyed.

5.16 There are seven different loading gauge profiles on the British railway network. The least generous is the *W6a* profile, which can only accommodate so called conventional freight wagons (most bulk type wagons used to convey coal, minerals etc..). The minimum requirement for intermodal traffic is the *W8* loading gauge profile. However, this profile can only accommodate standard height maritime containers (2.59m/8'6") and not the high-cube units now used on most deep-sea and intra-European shipping routes (2.9m/9'6" tall).

5.17 The *W9* loading gauge is the minimum gauge which can accommodate these intermodal units, albeit only on certain types of platform wagon. The *W10/W12* loading gauges can accommodate the full range of units on all standard platform wagons with a deck height up to 1.0m i.e. those used by most of the major traction operators. An appropriate site is therefore one where the adjoining railway lines and the approach routes are gauge cleared to at least W9, and preferably to *W10 and W12*. It is around such sites that rail freight operators will develop their own service strategies, and property developers will wish to develop rail linked distribution parks. Network Rail is currently completing a series of upgrades to key strategic routes (to at least W10). At present, this does not include the Midland Main Line (MML), however the so called 'electric spine' proposals will subsequently provide a W10 cleared route on the MML north of Bedford (likely to be from 2019 – see Part B report).

5.18 The diagram below shows the different Network Rail loading gauges (W6a-W12) alongside the more generous loading gauge profiles (GA to GC) more generally available in mainland Europe (HS1 from the Channel Tunnel is GB+).

Loading Gauge Profiles



5.19 *Route capacity* is a key issue, particularly where passenger train growth could potentially squeeze out surplus capacity which could be utilised by freight. The Route Utilisation Strategies (RUSs) undertaken by Network Rail have attempted to address the issue of capacity. Clearly there has to be sufficient train path capacity available so that freight train service providers can operate trains to serve rail-served strategic logistics sites. This includes key strategic trunk routes and final approach routes into a site. Commercially attractive sites are generally recognised to be those where the adjoining railway lines are able to provide at least one freight path per off-peak hour per direction.

5.20 Strategic logistics sites ideally should connect to key origins/destinations directly (e.g. deep-sea container ports, Channel Tunnel etc..) without the requirement to use long circuitous routes. Similar to some motorway interchanges, access between different railway lines at junctions can be restricted to certain directions due to the layout/alignment of the tracks together with the number/type of crossovers and chords installed at the junction. If direct access is not possible, it results in freight trains having to pass a junction and then change direction (by means of a locomotive 'run round') so that they can enter the junction in the right direction. Alternatively a train could take a long diversionary or circuitous route so that the junction is approached in the right direction. These add both time and costs to a rail freight service and, in addition there are also capacity issues if a main line has to be used for a locomotive run round. Those sites able to offer direct rail access, without the need to reverse or use a circuitous route will gain competitive advantages compared to other sites.

5.21 Despite the above market conditions, 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. Firstly, existing land supply and planning consents have to be considered – there are existing sites with consents for B8 or allocated in local plans for distribution employment. Secondly, 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. Such sites can therefore be considered ones which meet all the other criteria outlined in this section, bar the modal choice requirements outlined above and the rail terminal facilities criteria discussed in the sub-section immediately below.

Large and Flexible Configuration: Rail Terminal Facilities

5.22 Rail-served commercially attractive strategic logistics sites will be those sufficiently large and flexible in their configuration to provide:

- An Intermodal terminal; and
- Internal reception siding rail facilities.

5.23 Rail terminal facilities at strategic logistics sites can be achieved in two ways. Firstly, locating distribution centres on the same site as an intermodal terminal. Goods arriving in an intermodal unit (e.g. maritime container) at the intermodal terminal by rail are transferred to the on-site warehousing via internal road shunts i.e. by means of yard-tractors and avoiding use of the public highway. Secondly by directly rail linking through the provision of a siding along one side of the warehouse. This type of rail connectivity relies on the use of conventional box wagons. Box wagons are shunted into the warehouse siding, and the goods then transferred directly from the wagons to storage by forklift truck equipment, again

avoiding the need for a local road haul. The provision of a rail link by means of an intermodal terminal option, however, is by far the more important form of rail connectivity that is demanded by the market, and is therefore regarded as the minimum requirement. Consequently, competitive sites will in future be those which are able to accommodate intermodal terminal facilities.

5.24 The ability to accommodate reception sidings is also an important feature of a competitive logistics site. Reception sidings effectively act as a place to 'park' trains off the main line before and after cargo handling at an intermodal terminal or rail connected warehouse. Reception sidings are required at a rail freight terminal for four main reasons:

- Due to pathing and timetabling constraints, trains will normally arrive at a rail freight terminal well before they are required for cargo handling. Hence they require somewhere to 'park' while they await their turn in the actual cargo handling part of the rail terminal.
- Once a train has been loaded/unloaded and is ready for departure, it requires somewhere to await the arrival of a mainline locomotive. Completion of cargo handling can be well before the mainline locomotive arrives,
- The cargo handling sidings, either at the intermodal terminal or rail connected warehouse, are unlikely to be long enough to accommodate the whole train. Trains will therefore need to be 'sectioned' at some point before they can be accommodated in cargo handling sidings.
- As a reception siding would not normally belong to Network Rail, the terminal operator is not reliant on main line locomotive traction providers to undertake shunting or sectioning of trains, and can undertake these operations themselves by employing the use of their own 'off main line' shunting equipment. This improves the efficiency and throughput capacity of a terminal.

Large and Flexible Configuration: Warehouse Units

5.25 The size of a strategic logistics site and its configuration is an important factor for two main reasons:

- For directly rail-served sites, it contributes towards the viability of rail freight services to and from that site; and
- Sites need to be big enough to accommodate the large scale distribution centres that are be required by the market (equally applicable to non rail-served sites).

5.26 A commercially attractive rail-linked site is considered to be one which is large enough and flexible in its configuration to provide *at least 200,000 square metres* of floor space in total and individual plots with the ability to accommodate very large warehouses *up to 100,000 square metres in size* (plot of 25ha on the basis that floor space is around 40% of total plot

footprint). Taking into account the need for the rail terminal facilities, this suggests that new rail-served strategic logistics sites will need to be *at least 50ha in size* (sites above 60ha being considered nationally significant infrastructure, and are therefore considered via the Development Consent Order process).

5.27 In addition to the cost of rail freight compared with road haulage, rail as a mode will only be attractive to the occupiers of the distribution centres on a logistics site if the site is able attract frequent full length rail freight services to/from a wide range of locations. In practice, this means daily train services to/from the main deep-sea container ports and other (twice daily with Felixstowe and Southampton) along with other key cargo origins, including Scotland for national distribution. This implies around 8 train services in total.

5.28 Given that floor space is proportional to cargo throughput, larger logistics sites will therefore be able to attract greater number of rail services compared with smaller development. The minimum site size therefore able to generate 8 daily inbound trains is around 200,000 square metres, as follows:

- Pallet capacity of 300,000 (at 1.5 pallets per square metre);
- Annual pallet throughput of 3.6 million (at 12 stock turns per annum);
- Annual number of unit loads to site being 138,462 (at 26 pallets per unit)
- Daily number of unit loads to site being 413 (at 335 days per annum);
- Units loads by rail at 206 (50% rail/road modal split);
- 8 trains inbound per day (at average of 25 units per train).

5.29 Individual plots with the ability to accommodate very large warehouses *up to 100,000 square metres in size* will also be required (plot of 25ha on the basis that floor space is around 40% of total plot footprint). This was demonstrated in the analysis presented in Section 4 above.

Labour Supply

5.30 Distribution activity can be labour intensive (see Section 6 below for detail). Despite the automation of many logistics functions, most distribution warehouses still rely on manual labour for many of their activities. These include:

- Using a forklift truck to move pallets of cargo from an inbound HGVs/intermodal units to pallet racks in the correct storage area in the warehouse;
- Inputting data covering inbound cargo into the warehouse's inventory management systems (often undertaken using hand held barcode reading devices);
- Picking goods from storage to the correct order and consolidating them with other goods ready for loading to outbound HGVs/intermodal units;

- Recording the outbound movement of goods on the inventory management system; and
- Loading pallets onto outbound HGVs/intermodal units.

5.31 In addition to these tasks, there are the usual administrative jobs associated with large labour intensive industries e.g. Payroll, Human Resources. Drivers for the delivery HGVs based at the warehouse will also be required. Intermodal terminals require gantry crane operators, yard tractor drivers, HGV drivers and security staff. Based on the data in Section 6 below, a logistics site incorporating 200,000 square metres of distribution floor space will require up to 2,000 staff just for the warehousing, plus HGV drivers and employees for the intermodal terminal.

5.32 Consequently, a commercially attractive strategic logistics site will be one which is located as follows:

- In or near areas of 'employment need';
- In areas with below average wage rates;
- Where labour is available with the required qualifications; and
- With reasonable travel to work distances and can be served by sustainable transport.

Located Away From Incompatible Land-uses

5.33 Distribution activity needs to operate 24 hours per day, seven days per week. However there are noise and visual impacts associated with distribution. Where possible, deliveries by HGV are normally undertaken during the night when traffic congestion is minimal. Distribution centres therefore need to be accessed during night time hours. Rail freight facilities, parking areas for road trailers or areas where containers are stacked need to be illuminated during the hours of darkness for both practical and safety reasons. Large flood lights therefore need to be erected. Many freight trains also run at night when conflicts with passenger services are minimised. Rail freight facilities at a logistics site will therefore need to receive, despatch and handle trains at night time. All of these activities, and others which occur, cause noise and visual pollution. Commercially attractive logistics sites are therefore located away from residential areas, for the above given reasons, so that 24 hour operation is possible.

6. EMPLOYMENT AND LABOUR IN THE LEICESTERSHIRE STRATEGIC DISTRIBUTION SECTOR

Section 6.1: Employment and Skills

Employment Numbers

6.1 The logistics industry is an important provider of jobs, either directly or indirectly. Nationally, direct employment in the sector accounts for nearly 6% of the workforce. This rises to over 8% (9.4% within Leicestershire) if the indirect employment of the logistics functions of other industries is taken into account (Data derived from Annual Population Survey 2011 and Annual Business Inquiry 2007). This accounts for approximately 2.25 million people employed in the sector nationally and 15,275 within the East Midlands. The indirect employment resulting from logistics is difficult to quantify; Skills for Logistics identifies that up to 10-12% of jobs in most regions to be logistics related when indirect employment is taken into account.

6.2 In UK employment terms this puts logistics at approximately the same size as the construction industry and just under half the size of the manufacturing sector. However, as manufacturing employment in the UK is to continue to decline, by becoming increasingly automated or moving to cheaper locations overseas, the distribution of goods (intra-regionally or internationally) has become an increasingly vital part of the UK economy.

6.3 Data provided by the Office of National Statistics indicates that distribution employment has increased by approximately 1 million in the past 30 years compared to a decrease of 4 million in the manufacturing sector. The forecasts suggest that this growth will continue to accompany demand for distribution warehouses and Skills for Logistics[9] Working Futures IV projects that 820,000 additional workers will be needed in the sector in England by 2020; 39,000 in the East Midlands.

Employment Quality and Profile

6.4 There is a common misconception that the Logistics industry only provides poorly skilled, low wage employment with few opportunities to develop a successful career path. Although operatives and elementary positions account for 47% compared with 19% across the whole economy, it is predicted that recruitment for managerial positions in the period to 2020 will exceed recruitment in other occupational groups (Skills for Logistics 2009).

[9] Skills for Logistics is the Government licensed Sector Skills Council for the UK's freight logistics industries

As aforementioned, logistics is more complex than the seemingly simple movement and storage of goods and is not widely understood outside the industry. It forms part of complex supply chains, many of which are strategic and vital to the successful operation of a company. In general, logistics provides good quality jobs, with a full complement of skills throughout the length of the supply chain, as shown in Table 6.1 below.

Table 6.1: Labour composition of typical Logistics company

Sector	Position	Responsibility
Managerial	Contract manager	Profit and loss, driver staff and operational efficiency
	Transport manager	Organising delivery routing and ensuring maximum efficiency is achieved within budget
	Warehouse manager	Co-ordinating operations within the warehouse
	Operations manager	Prime responsibility for logistics operation, inc. staff development, business performance and strategic planning
	Freight forwarder	Movement of freight across international borders
	Logistics manager	Overall management of the supply chain
	Inventory specialist	Ensuring that the right stock is available at the right time
Non-managerial	LGV driver	(unlikely to ever have two days the same)
	LGV instructor	Ensuring that potential LGV drivers achieve the required proficiency level
	LGV technician	Maintaining an organisations' fleet of vehicles
	Warehouse operative	Part of team responsible for handling goods through from receipt to dispatch
	Fork-lift truck operator	Safe transportation of goods around warehouses
	Courier	Ensuring expedient delivery of urgent packages
	Transport clerk	Day to day responsibility for administration of the transportation operation
	Customer service assistant	Representing an organisation to its customers
	Removals porter	Working with a small team helping people to relocate
	Packers	Responsible for ensuring products are contained within suitable packaging to provide protection during transit.

Source: Skills for Logistics Council: Careers in Logistics

6.5 Only 6% of the workforce logistics are aged under 25 compared with 13% over the whole economy. This may in part be due to negative perceptions and lack of awareness of opportunities and in part the tendency for the sector to recruit predominantly from within the sector. In addition the workforce is ageing, with 44% ages 45 and over. This is likely to lead to a shortage in staff as there will be an insufficient intake of young people to satisfy replacement demand in addition to the recruitment needed to provide for growth in the sector. The Skills for Logistics Sector Skills Council report that 1-in-9 employers in the sector report at least one vacancy and have concerns in relation to future recruitment.

6.6 Typically, logistics property provides better quality jobs than light industrial space. Research undertaken by Prologis over 32 warehouses employing nearly 6,000 people found only 5% were unskilled. Savills' industry experience indicates that large distribution warehouses invariably incorporate a proportion of office space integral to the operations of the warehouse and thus increasing the proportion of managerial, professional and administration occupations. Many distribution locations therefore see the occupation of relatively large office space, which would not generally be the case in the local market if the offices were not connected to the distribution function.

6.7 A snapshot review of jobs conducted on 24th February 2014 in the logistics sector in Leicestershire advertised on the Careers in Logisitics' website showed 28 available positions. Of these 54% were in managerial roles, 40% were for drivers whilst the remainder were for warehouse operative and transport planner.

6.8 34 of the 56 jobs (61%) advertised on 'The Logistics Website' job search on the same day were for managerial positions and of these 8 were offering salaries in the region of £100,000 per annum.

6.9 The Department for Work & Pensions' '*Universal Jobmatch*' service tracked for a one month period in 2013 showed the following UK wide availability. This further illustrates the demand for higher quality roles and the employment growth within the sector.

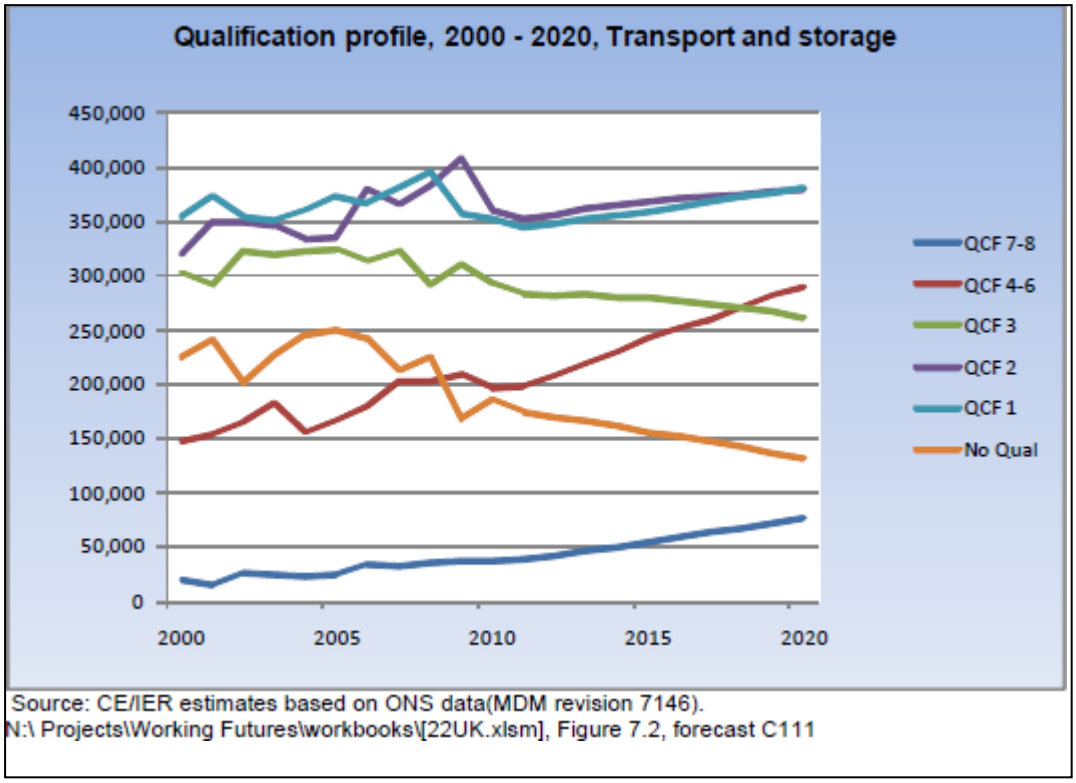
Table 6.2: Universal Jobmatch – National Availability

Job Role	27th Jan - 2nd Feb	3rd Feb - 9th Feb	10th Feb – 16th Feb	17th Feb – 23rd Feb	24th Feb – 2nd March
Transport Manager	10,081	10,857	11,341	11,933	13,113
Inventory Clerk	1,885	2,029	2,007	1,976	2,074
Distribution Clerk	1,632	1,708	1,543	1,594	1,858
Lorry Driver	1,374	1,315	1,282	1,241	1,332
Postal Clerk	832	809	832	849	898
Forklift Truck Driver	601	644	664	659	731
Delivery Driver	239	218	200	176	182

Source: Universal Jobmatch

6.10 The Working Futures Sectoral Report August 2012 states that although the occupational structure in Transport and storage favours those qualified at intermediate and low level this is expected to fall by 2020 whilst those with higher qualifications is likely to rise from 15% (2010) to 25% by 2020. The qualification profile change within the sector is shown in Figure 6.1 below.

Figure 6.1



6.11 The numbers employed in the major occupational groupings, compared to all sectors nationally, are shown in Table 6.2 below. It is the case that the proportion of the workforce employed in distribution having no qualifications or who are qualified at less than NVQ level 2 standard is greater than the rest of the UK economy. However, this is balanced out in other higher skilled areas and is partly reflective of the ageing workforce in logistics. Recruitment drives and attraction of 'new blood' however are increasing at an accelerating rate as the image of the industry improves and its growing importance to the economy realised.

Table 6.3: Major occupational groups within the UK Logistics sector

	Logistics	All Sectors (UK)
Managers, Directors and senior Officials	14%	10%
Professional Occupations	4%	19%
Associate Professional and Technical Occupations	11%	14%
Administrative and Secretarial Occupations	13%	11%
Skilled Trade Occupations	3%	11%
Caring, leisure and Other Service Occupations	1%	9%
Sales and Customer Service Occupations	6%	8%
Process, Plant and Machine Operatives	24%	6%
Elementary Occupations	25%	11%

Source: APS 2011

6.12 As the sector develops there will be an increased demand for technology and IT professionals, including social network and web-based marketing capabilities. Skills for Logistics research has indicated that where employers have had difficulty recruiting the primary reason given (43%) was the low number of applicants with the required skills.

Employment Status

6.13 Research conducted by Prologis in 2010 which used a sample of 19 large scale warehouse occupiers showed part time workers to make up 12% of the total workforce compared to 27% of UK workforce in all sectors (Census 2011).

6.14 2011 Census data showed the average weekly hours worked by the Transport and Storage Industry (Standard Industrial Classification 2007) to be 35.6 hours per week compared to an all industry UK average of 31.8 hours per week and a range of 23.8 hours (Education) to 47 hours (Agriculture, Forestry and Fishing). In addition it cites the change in part time workers in the UK workforce from 24% in 1992 to 27% in 2011.

6.15 The Working for Futures Sectoral Report 2010 -2020 forecasts an increase in part time workers in The Transport and Distribution Sectors (SIC2007 headings: 49-53) from 13.6% in 2010 to 14.3% in 2015 and 15% in 2020. This compares to all sector averages of 20.6% (2010), 21.2% (2010) and 22% in 2020. This data does not indicate a larger than average number of part time workers employed in logistics despite the recognised use of seasonal part time workers.

6.16 The Freight Transport Association study conducted in association with PwC, – 'The Logistics Report 2012' referred to the tendency to use temporary staff to cover peaks but the 2013 report states those interviewed intended to reduce their use of part time staff.

6.17 Recent research conducted by the Department for Skills and Innovation and published in December 2013 in the consultation document 'Zero Hours Employment Contracts' found that the use of 'zero hours contracts' has increased over the last 5 years and that there are approximately 250,000 (0.8% of total employment) such contracts in use in the UK today. Although there is currently no legal definition of a zero hours contract it generally refers to a contract which does not oblige the employee to accept nor the employer to offer any work. Estimates from the Labour Force Survey quoted in the consultation document show 'Distribution, Accommodation and Food Services' as having the largest proportion of zero hours contracts. However this sector group includes the hotel and restaurant sector which has a very large number of employees on zero hours contracts.

6.18 Given the above data there is no reason to conclude that the percentage of zero hours contracts in the distribution sector exceeds the average across all sectors.

6.19 Census data of average weekly working hours, Prologis research and the growth in part time workers predicted by The Working for Futures Sectoral Report 2010 -2020 does not provide evidence to suggest that there is a larger than average number of part time workers employed in logistics.

Skills and Training

6.20 Skills for Logistics states that the UK Logistics Sector generally is poorly qualified; 44 per cent do not hold a Level 2 qualification. Furthermore 63 per cent of all machine operatives (drivers) are

6.21 not qualified to minimal skills level, nor are 55 per cent of elementary occupation (warehouse operatives, postal workers, couriers) and nor are 52 per cent of managers.

6.22 The UK Sector Skills Assessment for the Freight Logistics and Wholesale Sector report 2010 identified that employees in the Logistics Sector are more likely to not have any qualifications than the national average and are much less likely to have a degree than

average. At that time 17% of the Logistics workforce had a degree or above compared with 35% across all sectors

6.23 64% of employers thought that some of their staff would need to acquire new skills or knowledge over the next 12 months. Employers thought this for many different reasons, such as new legislation or the development of a new product. Employers also thought that it was managers who were most likely to need to gain additional skills. In line with the skills gaps, employers also thought that training was needed to provide technical, practical or job-specific skills. The below table shows percentage of the workforce not qualified to the minimum skills level.

Table 6.4: Workforce and Minimum Skills Level

Major occupational group	Examples of job role	Type of skills needs**	% of workforce not qualified to min skills level
Managers	Transport and distribution managers Storage and Warehouse managers	Technical, Customer service, ICT, Managerial (L&M) Communication	51%
Associate professional	Importers, Exporters. Buyers and purchasing officers	Customer service, ICT Communication	46%
Administration and secretarial	Transport and distribution clerks	Customer Service, ICT Communication	42%
Process, plant and machine operative	LGV and van drivers	Technical, Customer service, ICT (sat navs)	65%
Elementary occupations	Warehouse operatives, postal workers, couriers	Technical, Customer service, ICT	62%
Other Groups	Sales and customer service	Technical, generic	32%

** technical, generic, transferable

Sources: Skills for Logistics Sector Skills Assessments 2010, Skills for Logistics Employer Survey 2009 and Skills to Survive Report 2009, Skills for Logistics Employer Survey 2013

6.24 The sector generally undertakes training with local training providers or specialist logistics providers, with bite-sized non-accredited courses favoured. For example, of the 682,500 employees that had received training in the previous 12 months, only 16 trained towards a nationally recognised qualification.

6.25 46% of the companies that participated in the Skills for Logistics survey had provided some form of training in the previous 12 months for staff members. Size of company is a key factor in the likelihood of training taking place. Evidence shows that 41% of companies with fewer than 10 employees provided training, while 83% of those with more than 200 employees did so. This is significant in a sector dominated by small businesses.

6.26 An update employer survey conducted by Skills for Logistics and published in 2013 found that over 70% of employers had arranged or funded off-the-job training or informal training. Training has been offered in a range of areas, such as job specific training, health and safety, supervisory and management training. Although employers are positive about the next 12 months a significant proportion (69%) do not plan to move into new areas of work. They do however anticipate changes taking place, such as changes to government regulation and governance and addressing the green agenda and anticipate this will require new ways of working. A number of skills have been seen as important over the next 12 months such as job specific skills, teamwork, interpersonal skills, communication, organising and planning.

Salary Levels

6.27 The Skills for Logistics DBIS LMI Project for AACS, March 2011 gave a comprehensive overview of employment within the Logistics sector in the UK, with salary levels, broken down into seven industries. This is shown in the table below. Unfortunately, this data is not differentiated by regions/sub-regions.

6.28 The Freight Transport Association with PwC 'The Logistics Report 2013' reports that over the last 2 years the logistics sector has responded to the challenging economic conditions by pegging wage settlements to below inflation, reducing overtime and using temporary staff to cover peaks.

Table 6.5: Data from Skills for Logistics (DBIS LMI Project for AACS, March 2011)

Industry	Percentage UK Logistics Workforce	Pay Scale Lowest	Highest	Skills Shortage	East Midlands Employment Numbers
Air Freight	1%	£10k Air Import operator	£40k Manager	No	1,800 (est)
Wholesaling	48%	£10k Sales Assistant	£70k Sales Manager	Yes	67,400 (41%)
Road Haulage	13%	£8k Diver's Mate	£60k Supply Chain Manager	Yes	19,400 (12%)
Storage and Warehousing	8%	£12k Warehouse Assistant	£40k Warehouse Manager	Yes	29,800 (19%)
Freight Forwarding	8%	£11k Van driver	£39k Transport Manager	Yes	14,400 (9%)
Postal Services	14%	£12k Van Driver	£30kLGV Driver	Yes	17,000 (11%)
Couriers	5%	£11.5 k Courier	£25k Experienced Motorcycle Courier		6,800 (4%)

Employment Densities

6.29 OffPAT and the Homes and Communities Agency produced an Employment Densities Guide in 2010 (2nd Edition) to assist with the estimation of employment generated by property development. Employment density ratios are expressed as number of square metres per Full Time Equivalent (FTE) employee. Employment densities for B8 uses are shown in the table below. Unfortunately, this data is not differentiated by regions/sub-regions.

Table 6.6: Employment Density Ratios

Use Class	Use Type	Area FTE (sq m)	Floor Area Basis	Potential Variation
B1 (c)	Light Industry (Business Park)	47	NIA	
B2	General	36	GIA	Range of 18-60 sq. m
B8	General	70	GEA	Range of 25 – 115 sq m. The higher the capital intensity of the business, the lower the employment density.
B8	Large Scale and High bay Warehousing	80	GEA	Wide variations exist arising from scale and storage duration.

6.30 There are wide variations within the sector. Research conducted in 2006 and 2010 by developer, Prologis, showed that over this time period the nature of employment within distribution centres had changed; the numbers of administrative or support staff, managerial positions, IT and customer services had increased. This coincides with a decrease in employment density ratio from 95 sq m per person in 2006 to 77 sq m in 2010.

Employment in the Logistics Sector in Leicestershire

6.31 Leicestershire benefits from its central location in Great Britain, a sizeable population of circa 650,500 (Census 2011) and its excellent transport links. Wage levels within the county, at £473.40 gross weekly, are lower than the national average and in line with mid-range salary levels commanded in the logistics sector. Educational levels are broadly in line with the national average; within Leicestershire 7.7% have no qualifications compared to 9.3% in the East Midlands and 9.7% in the UK. 5.9% of the population in Leicestershire have 'other qualifications' compared to 6.9% in the East Midlands and 6.3% in the UK. Within Leicester City 14.2% have no qualifications and 10.3% have 'other qualifications'.

6.32 Skills for Logistics give data for the East Midlands which states an employment figure of 156,600 workers in the region employed in the in the logistics sector. However East Midlands data will include distribution centres in Northamptonshire.

6.33 The LLEP Economic Growth Plan 2012-2020 gives a figure of 51,300 jobs in the LLEP area in distribution and logistics, accounting for 11.6% of local employment. It identifies the high levels of employment in North West Leicestershire and the Harborough District at Magna Park. In addition it 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. These statistics serve to underline the importance of the sector to the county.

6.34 A breakdown of percentage total employment in transport and storage by local authority is shown in the table below.

Table 6.7: 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)

Employment Forecasts

6.35 Workplace jobs forecasts in B8 Warehousing, 2010-2031 broken down to district levels have been derived from Office for National Statistics (Census of Population, Business Register Employment Survey, Labour Force Survey, and respective antecedents, 1971-2010) were used by PACEC in the Leicester and Leicestershire HMA Employment Land Study.

Table 6.8: Treasury Forecasts May 2012

	Workplace Jobs (000s)			
District	2012	2021	2026	2031
Blaby	4.8	5.1	5.2	5.3
Charnwood	3.7	3.2	3.2	3.1
Oadby and Wigston	1.2	0.9	0.9	0.9
Harborough	5.9	7.4	7.9	8.2
Hinckley and Bosworth	3.3	2.7	2.6	2.5
Melton	1.1	1.0	1.0	1.0
North West Leicestershire	9.6	11.4	12.0	12.3
Leicester	19.3	19.5	19.7	19.7

Published in January 2013 by PACEC in the Leicester and Leicestershire HMA Employment Land Study

6.36 Those areas predicted to show the greatest increase in workplace jobs coincide with the anticipated increase in demand for 'super-size' road-rail linked warehouses in the Leicestershire M1 corridor.

6.37 Generally since 1991 industrial employment in the region has been in decline whilst warehousing employment has increased. The 2008 PACEC Study gave a detailed summary of employment change in each district over this time period. In accordance with the above job forecasts this trend has been most pronounced in Harborough and NWL.

6.38 PACEC Use Class job forecasts were calculated by drawing up a correspondence between the Standard Industrial Classification (SIC) and the office, industrial, and warehousing land use classes. There are methodological shortcomings in terms of mapping SIC to use classes and more accurate data can be derived by attributing a percentage of B8 use to each relevant industrial sector (identified in the 2007 Standard Industrial Classification). Notwithstanding this PACEC's proxy gives a useful indicator of trends.

Section 6.2: Contribution to the Regional Economy

6.39 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)[10]. The same dataset also shows that GVA attributable to wholesale/retail, transport/storage and food activities was £3,794 million or around 21% of

[10] Source: ONS - GVA by Industry Type at LEP Area Level, April 2014

the LLEP area total. Unfortunately, the ONS dataset by LEP area does not disaggregate the GVA figures beyond the industrial groupings shown above.

6.40 Overall, output from distribution-related activities has been out-performing manufacturing and this is set to continue in the foreseeable future. Table 6.9 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.

Table 6.9: Contribution to LLEP GVA of the Manufacturing and Wholesale/Retail, Transport/Storage and Food Sector

	GVA (£ millions)	
Year	Manufacturing	Wholsale/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

7. THE POLICY CONTEXT

7.1 The main aim of this Section is to describe the current policy context with respect to the development of strategic logistics sites.

Section 7.1: National Policy

7.2 The previous Labour Government had developed a suite of policy documents relating to mode choice, sustainable logistics and industry best practice. The current administration, however, has scaled back significantly its policy involvement, and there are effectively only three policy documents directly relating to the logistics sector, namely;

- The draft National Policy Statement for National Networks;
- The National Planning Policy Framework (relevant sections); and
- The Logistics Growth Review.

7.3 The relevant sections of each document are reviewed below.

Draft National Policy Statement for National Networks

7.4 The National Policy Statement (NPS) for national networks was published in draft form by the DfT in December 2013. It sets out the Government's vision and policy for the future development of nationally significant infrastructure projects on the national road and railway networks. It provides guidance for promoters of nationally significant infrastructure projects, and the basis for the examination by the Examination Authority. The Secretary of State will use the NPS as the primary basis for making decisions on Development Consent Orders for nationally significant infrastructure projects. The NPS has been published in draft form, but will be designated following the period of statutory consultation

7.5 The Government's vision and strategic objective is to deliver national networks that meet the country's long-term needs; supporting a prosperous and competitive economy and improving overall quality of life, as part of a wider transport system. This means:

- Networks with the capacity and connectivity to support national and local economic activity and facilitate growth and create jobs;
- Networks which support and improve journey quality, reliability and safety;
- Networks which support the delivery of environmental goals and the move to a low carbon economy; and
- Networks which join up our communities and link effectively to each other.

7.6 Key sections of the draft NPS addresses the development of large scale strategic logistics facilities greater than 60ha which are connected to both the highway and road networks. Known as *Strategic Rail Freight Interchanges (SRFIs)*, they are classed as nationally significant infrastructure projects. Interim guidance with respect to SRFIs was previously published by the DfT in November 2011 (Strategic Rail Freight Interchange Policy Guidance). The policy set out in the NPS on SRFIs confirms the policy guidance from 2011, which will be cancelled once the final NPS has been designated.

7.7 Paragraphs 2.37 to 2.51 addresses the need for the development of SRFIs. Once designated, it will be the principal policy document concerning the development of SRFIs. Essentially, the document sets out the case for SRFIs, that there is a need for new SRFI capacity (particularly in the south east of England), how they should be developed and provides guidance with respect to their locations in relation to markets and transport networks.

7.8 The document describes a SRFI as a large multi-purpose freight interchange and distribution centre linked to both the rail and trunk road system. It has rail-connected warehousing and container handling facilities and may also include manufacturing or processing activities (Paragraph 2.38). 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.

7.9 It states that the aim of SRFIs 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 2.40).

7.10 A number of 'drivers of need for SRFIs' are identified by the NPS.

1. Changing needs of the logistics sector. The document states that a network of SRFIs is a key element in aiding the transfer of freight from road to rail, supporting sustainable distribution, rail freight growth and meeting the changing needs of industry, especially from the ports and retail sectors. It notes that existing rail facilities offer no opportunity to expand, they lack modern warehousing facilities and they are not conveniently located for the modern logistics and supply chain industry.

2. Rail Freight Growth. The NPS states that the development of additional capacity at Felixstowe and London Gateway will lead to a significant increase in logistics operations. This will increase the need for SRFI development to reduce the dependence on road haulage to serve major markets. It notes that Network Rail, on behalf of a *Freight Market Study Working Group*, published a Freight Market Study in October 2013. This study contained

unconstrained rail freight forecasts to 2023 and 2033 (produced by MDS Transmodal to inform the Freight Market Study). These are reproduced in the table below.

	Billion tonne-km (compound annual growth from 2011)		
	2011*	2023	2033
TOTAL	**22.9**	**32.5 (2.9%)**	**43.7 (3%)**
Selected commodity groups			
Ports and Channel Tunnel intermodal	5.3	11.0 (6,4%)	16.1 (5.2%)
Domestic intermodal	1.1	7.1 (16.6%)	13.4 (11.9%)

Source: produced for Network Rail by MDS Transmodal

The NPS considers these forecasts robust and the Government has accepted them for planning purposes. While these forecasts, in themselves, do not provide sufficient granularity to allow site-specific need cases to be demonstrated, they confirm the need for an expanded network of large SRFIs across the regions to accommodate the long-term growth in rail freight. They also indicate that new rail freight interchanges, especially in areas poorly served by such facilities at present, are likely to attract substantial business, generally new to rail.

3. Environmental. The document notes that rail transport has a less negative impact on society than road transport and so has a crucial role to play in delivering reductions in pollution and congestion.

4. Jobs and Growth. The NPS states that SRFIs can provide considerable benefits for the local economy. This is because many of the on-site functions of major distribution operations are relatively labour-intensive and this can create many new job opportunities and contribute to the enhancement of people's skills and use of technology, with wider longer term benefits to the economy.

7.11 The NSP states that transfer of freight from road to rail has a part to play in reducing greenhouse gas emissions. 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. 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 (see below) (Paragraph 2.49).

7.12 Overall, the NPS concludes 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)

7.13 Paragraphs 4.78 to 4.85 addresses the form and function of SRFIs. It notes that SRFIs should include warehouses to which goods can be delivered from the railway network either directly or by another form of transport, and that a significant proportion of the warehousing on a proposed site is rail connected from the outset.

7.14 SRFIs 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 the 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.

7.15 Adequate links to the rail and road networks are seen as essential. As a minimum a SRFI should ideally be located on a route with a loading gauge profile 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).

7.16 As SRFIs tend to be large scale commercial operations, they will need to operate 24/7. 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. SFRIs can provide many benefits for the local economy. The existence of an available and economic local workforce will therefore important.

7.17 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 775m 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.

7.18 Paragraphs 2.1 to 2.24 of the draft NPS addresses the need for the *development of the national road network*. It notes that the roads are the most heavily used mode of transport in England and accounts for two-thirds of freight deliveries. It states that the strategic road network, while making up only 2% of roads in England, carries two-thirds of freight. The strategic road network provides critical links between cities, major ports and rail terminals. Two drivers of need for the development of the national road network are identified, namely:

- Economic growth and user satisfaction. Well connected road infrastructure is a vital component of economic growth; and

- Traffic Growth. Based on central estimates, the NPS states that road traffic on English roads is expected to grow by 42% between 2010 and 2040. On the strategic road network this growth is forecast to be 46% over the same time period. Its notes that while road traffic levels have declined by around 3.5% between 2007 and 2010, this was mainly the result of the economic downturn and rising oil prices.

7.19 Consequently, it concludes that increased traffic without sufficient capacity will result in more congestion, greater delays and more unpredictable journeys. Without action, it is forecast that the proportion of time spent in delayed traffic will increase from 16% to 24% by 2040. Congestion on the national road network is forecast to increase by 62% from 2010 to 2040 based on the central forecasts (Table 2.1 from the NPS).

7.20 The Government has ruled out a number of alternatives to the development of the national road network as neither desirable or viable, namely:

- Better maintenance and asset management;
- Demand management – it has rules out a national road pricing to manage demand; and
- Modal shift.

7.21 The Government's policy is therefore to reduce congestion and unreliability by focusing on improving and enhancing the existing national road network, and will include:

- Enhancements such as junction improvements, new slip roads and upgraded technology;
- Implementing 'smart motorways'; and
- Improvements to trunk roads, in particular dualling single carriageway trunk roads.

7.22 It notes, however, that in some cases it will not be sufficient to expand existing capacity and that new road alignments and corresponding links may be needed to support increased capacity to meet the needs created by economic growth.

The National Planning Policy Framework

7.23 National planning policy for England is set out in the National Planning Policy Framework (NPPF), which was published by the Department for Communities and Local Government (DCLG) in March 2012. Replacing previous guidance, it sets out the Government's planning policies for England and how these are expected to be applied in local plans and planning decisions. A number of key sections of the NPPF are therefore relevant to this study.

7.24 Sustainable transport is addressed in Section 4 of the NPPF and overall it provides for transport policies that facilitate sustainable development but also contribute towards wider sustainability and health objectives (Para 29). In summary the NPPF:

- 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 (Paragraph 34). In this case, it essentially expects large scale distribution to be located within SRFIs (see above), alongside inland waterways or within a port;
- Encourages solutions which support reductions in greenhouse gas emissions and reduce congestion (Paragraph 30);
- Supports development which, where reasonable to do so, facilitates the use of sustainable modes of transport (Para 30)
- Promotes (and protects) opportunities for the use of sustainable transport modes for the movement of goods (Paragraph 35); and
- Encourages developments that are located at sites which accommodate the efficient delivery of goods and supplies (Paragraph 35).

7.25 The NPPF states that 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 SRFIs (Paragraph 31).

7.26 The NPPF does not seek to 'force' the use of non-road modes or specify particular levels of freight that have to be lifted by non-road modes at rail-served sites. Instead, decisions made by planning authorities should ensure that opportunities to use non-road modes are protected and promoted, and that developments are located 'where the use of sustainable transport modes can be maximised' (paragraph 34).

7.27 With respect to the imposition of planning conditions, the NPPF clearly states that they 'should only be imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and that they are reasonable in all other respects' (paragraph 206).

7.28 The NPPF also states that local planning authorities should have a clear understanding of business needs within the economic markets operating in and across their area. This will involve working with neighbouring authorities, Local Enterprise Partnerships and the business community to understand their changing needs and identify barriers to investment, including a lack of infrastructure (Para 160). Local planning authorities should also work with other authorities and providers to assess the quality and capacity of infrastructure for transport (Para 162).

The Logistics Growth Review (DfT, 2011)

7.29 This document was published by the DfT in November 2011 as part of the Government's wider Growth Review strategy. Its main aim was to identify the barriers to economic growth within the logistics industry, and present a series of measures to address these identified barriers. It was published alongside the SRFI Policy Guidance document (which will be replaced by the NPS Statement for National Networks – see above) and the National Infrastructure Plan. The document effectively forms the Government's current policy towards the logistics sector.

7.30 The document notes that the logistics sector accounts for around 9% of UK Gross Value Added (GVA) and 7% of total employment, and that the sector is already extremely competitive. It states that facilitating economic growth in the sector is critical to the Government's overall growth strategy (Paras 1-3).

7.31 The document states five core areas in which the Government can play a significant part in increasing the productivity of the logistics sector. One area directly relevant to this study is as follows:

1. Giving industry greater confidence to invest. In particular, by removing planning barriers to sustainable logistics development, with a focus on SRFIs, and by promoting use of private capital and facilitating access to capital for commercial investment. The document notes that road and rail transport infrastructure plays a vital role, and that according to the rail freight industry's own forecasts (see NPS review above) growth can be expected in rail freight activity. It notes that this expansion will be difficult to deliver unless industry is able to deliver modern SRFIs, providing effective integration between road and rail networks (Paras 5 and 6).

7.32 The document lists a number of actions the Government is taking to address the barriers to growth identified. These included:

- A joint Ministerial Statement (by the Secretary of State for Transport and Secretary of State for Communities and Local Government) supporting the development of SRFIs and investment in rail freight terminals. This was presented to Parliament on the 29th November 2011;
- The Government has asked Network Rail to support the development of a network of SRFIs, working collaboratively with the wider logistics industry to speed up delivery of SRFIs and establish appropriate funding rail infrastructure elements of such proposals;
- Further investment in the Strategic Rail Freight Network (SFN – see below) in the current Control Period to 2014, to enhance the capacity and capability of the rail network serving the major deep-sea ports; and

- Further support for the rail freight industry in the Command Paper (Reforming our Railways, summarised below).

Section 7.2: Other Relevant National Document

7.33 Three further national policy and strategy documents are also relevant in this context, namely:

- Command Paper: Reforming our Railways;
- The Strategic Freight Network: The Long Term Vision; and
- The High Level Output Statement.

7.34 The relevant sections are reviewed below.

Command Paper: Reforming Our Railways (Department for Transport, 2012)

7.35 This document was published by the Department for Transport (DfT) in March 2012 and sets out the Government's vision for the railway industry and the policies that are required to realise that vision (Para 1.1). Furthermore, the document provides the policy framework for the High Level Output Specification (HLOS – which is summarised below) (Para 1.4).

7.36 Much of the Command Paper was concerned with reforms to passenger rail franchising (which have since been revised following the failure of the Virgin Trains/WCML franchise competition), fares and ticketing, the role of the regulator and the relationships between passenger operators and Network Rail in order to achieve savings to the industry cost base (and tax payer). However, part of Section 4 of the paper deals with the 'Expanding Freight Sector', which clearly states that Government policy is to promote further modal shift by, among other policies, promoting the development of Strategic Rail Freight Interchanges (Paras 4.43 to 4.47). It effectively re-confirms the contents of the SRFI Policy Guidance document (since replaced by the NPS).

7.37 The document states that the Government recognises the valuable wider benefits that rail freight delivers, and the need to give it certainty over its future. In particular it states that (Para 4.46):

- The Government will consider further investment in the Strategic Freight Network (SFN – see below), both to help make best use of the existing network and, by increasing its freight capability, to leverage continued private sector investment in rail freight growth;

- The Government will continue to provide support through the mode shift revenue support scheme to shift freight from road to rail where there are overall environmental and social benefits from doing so;
- The Government will provide a clear planning policy framework to support further private sector investment in rail freight terminals and rail-connected distribution parks, including Strategic Rail Freight Interchanges (SRFIs), to support growth (see summary of National Planning Policy Framework below); and
- Network Rail will work with the industry to safeguard strategic freight capacity and to facilitate strategic investment in SRFIs.

Strategic Freight Network: The Longer Term Vision (DfT, 2009)

7.38 The 2007 Railways White Paper announced the Government's intention of working with Network Rail to develop a Strategic Rail Freight Network (SFN) to facilitate the continued growth of rail freight services. The SFN is a core network of trunk freight routes, capable of accommodating more and longer freight trains, with a selective ability to handle wagons with a greater loading gauge, integrated with and complementing the existing mixed traffic network (Para 13). Despite being published under the previous Government in 2009, subsequent policy documents (including the HLOS – see below) have confirmed the current Government's commitment to further investment in the SFN to facilitate sustainable rail freight growth. It can therefore be considered 'active' and relevant.

7.39 To deliver a SFN, the 2007 White Paper recognised that interventions and investment will be required to:

- Optimise freight trunk routeings to minimise passenger/freight conflicts;
- Make the network available 24-hours a day, all year round;
- Eliminate pinch points; and
- Upgrade network capability.

7.40 SFN investment in the current Control Period (CP4, 2009 to 2014) has been focused on loading gauge enhancement to W10/12 and train lengthening on key routes from the major deep-sea ports. This document described ways in which the SFN will be further developed and enhanced beyond 2014 (i.e. after the current funding period) together with other initiatives which will accommodate the forecast freight growth to 2030 (Para 9).

7.41 Specific SFN schemes 2014 to 2019 and beyond will be developed as an integral part of the network planning process which will underpin the next HLOS (see below) and the emerging strategies for dealing with future passenger demand on the main line routes (Para 19).

However, the documents set out nine principals principles which will define the key requirements for the longer-term development of the SFN (Para 20). These are:

- Longer and heavier trains – 775m length trains on the SFN and new terminals (including SRFIs) being designed to accommodate train is this length;
- Freight and network-efficient operating characteristics – through running of freight trains where feasible;
- 24/7 capability – the 'seven day railway';
- W12 loading gauge – implemented as the standard loading gauge for all SFN routes;
- A mainland European loading gauge freight link – UIC B+ gauge, potentially on the Midland Main Line;
- New freight capacity particularly on key intermodal routes to meet forecast growth;
- Electrification of key routes;
- Freight paths – the strategic freight path scheme; and
- The development of new SRFIs.

7.42 The Midland Main Line is indicated in the Maps in Appendix A of the document as being part of the core SFN.

High Level Output Specification (DfT, July 2012)

7.43 The Railways Act 2005 requires that the Secretary of State for Transport set out for the Office of Rail Regulation the following information:

- What the Secretary of State wants the railway to achieve and deliver during the following Control Period (in this case 2014 to 2019) – the High Level Output Specification or HLOS; and
- The amount of public money available to secure delivery – the Statement of Funds Available or SoFA.

7.44 Both the HLOS and SoFA were published by the DfT in July 2012. The HLOS sets out, at a strategic level, the capacity and capability enhancements (outputs) for the national railway network the Government wants to be delivered over the following 5-year Control Period (to 2019). Network Rail and train operators are responsible for the detailed design and implementation of the outputs specified. The HLOS states the Government's vision for dynamic, sustainable transport that drives economic growth and competitiveness, putting the customer and business at the heart of transport (para 1). It notes that freight traffic conveyed by the railways is forecast to grow by 23% over the Control Period in question (2014 to 2019) (para 4).

7.45 The strategy outlined in the HLOS is built around four priorities. Two of these are directly relevant to the freight sector and the East Midlands, namely:

- The creation of an 'electric spine', an electrified and loading gauge enhanced freight corridor running from the south coast (Southampton) through Oxford and Bedford to the Midlands and Yorkshire (para 6); and
- Improving railway links to the major ports (para 10).

7.46 The electric spine sits alongside other previously announced electrification schemes, (which includes the Midland Main Line and Great Western Main Line). Once completed, this will create a network of electrified freight routes linking the main deep-sea container ports and the Channel Tunnel with major centres of population and economic activity (para 7). Given this position, SRFIs (or sites capable of accommodating SRFIs) which are located alongside this electrified network or a short distance from the network but capable of being electrified at relatively little cost can be expected to become more commercially attractive to the logistics sector (capable of receiving longer trains at lower operating costs when compared with diesel traction).

7.47 The HLOS and SoFA further confirm that the Government will continue to fund the development of the SFN, and has made available a 'ring fenced allocation' of £200 million over the 2014-2019 Control Period 'to fund investments identified by the industry' (para 51).

7.3 Local Plans

7.48 Local Plans (Core Strategies) currently adopted by the Leicestershire planning authorities also address the need for employment land (for strategic logistics activity) and sustainable transport. The relevant sections from each Core Strategy were previously identified within Section 2.3 above alongside the overview of the existing pattern of logistics/warehousing developments in each planning authority area.

8. AIRFREIGHT

8.1 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. Firstly, volumes handled are much smaller; only 2.3 million tonnes of airfreight was lifted in Great Britain during 2013 (and much of that through one airport – see below) compared with around 2,000 million tonnes by other modes. Secondly, cargoes are generally high value and time sensitive commodities moving predominantly on long distance international flows.

8.2 Thirdly, while the airfreight operators base their landside activities at warehouses ('transit sheds') which from the outside may look similar to the large scale buildings described earlier, they are not considered as conventional warehouses. They contain sophisticated (automated) handling and sorting systems. They are generally considerably smaller than those operated on behalf of the main retailers and distributors, with throughput/dwell times also being much quicker than at a standard RDC/NDC; cargo passing through in a matter of hours rather than days/weeks. As a result, transit sheds are not as 'land hungry' when compared with the facilities described in the previous Sections 2 and 4. Transit sheds also need to be located on or close to airport estates. The land-use implications therefore need to be addressed separately.

Section 8.1: Background

8.3 The airfreight market is essentially divided into three segments, namely:

- Airfreight carried in the bellyholds of passenger flights (both scheduled and charter);
- Airfreight carried in dedicated cargo aircraft (scheduled and charter); and
- Express service providers.

8.4 Freight carried in the bellyholds of passenger flights is the dominant market segment to/from Great Britain. In 2013, 1.6 million tonnes (70%) of airfreight was carried in this manner, compared with 0.7 million tonnes on dedicated freight aircraft or by the express service providers. Within this segment, the long haul (inter-continental) scheduled airlines are the dominant carriers of freight. This is for four main reasons, namely:

- Intra-European flights generally use smaller narrow bodied aircraft with limited payload capacity (e.g. Airbus A320) compared with the larger wide-bodied aircraft used on inter-continental flights e.g. Airbus A340 or A380;
- Surface modes, particularly the accompanied road freight industry, can normally match door-to-door transit times within the European market but for considerably cheaper rates;

- The intra-European passenger market is now dominated by the low cost/no-frills airlines. Their business model is based around short turnaround times at airports to maximise aircraft utilisation and the time taken to load cargo would not allow such operating practices; and
- Inter-continental charter flights do not offer the frequency required by the freight market e.g. normally weekly or twice weekly, and are often seasonal.

8.5 The long haul scheduled airlines principal operating strategy is to sell bellyhold capacity on flights to agents, known as airfreight forwarders. These in turn subsequently fill that capacity with orders placed with them by shippers (exporters). Specialist logistics operators are then contracted by the forwarders to collect cargo from shippers (by road goods vehicles) and deliver it to the passenger aircraft at departure airports. Cargo will pass via transit sheds close to airports, where it is sorted and packaged, before being loaded onto flights. Similarly at the receiving end, logistics operators are contracted to collect cargo from flights and deliver it to the customer (again via a transit shed). Most airlines therefore earn additional revenue by filling what would otherwise be empty bellyhold space, but do not become directly involved in the selling of capacity to shippers or managing the end-to-end supply chain.

8.6 Dedicated scheduled freight services, operated either by the freight division of a passenger carrier or a specialist airfreight airline, are utilised on routes which attract large enough volumes to justify a whole aircraft. However, as airfreight forms a very small proportion of total imports and exports, there are few trade-routes where frequent scheduled freight services are justified (hence the use of bellyholds on passenger flights, where there is demand for frequent flights). Also dedicated freighter aircraft can be chartered for one-off large individual consignments.

8.7 The *express service providers* (e.g. TNT, DHL, UPS) are essentially international parcel couriers who specialise in moving individual shipper consignments at less than container load quantities in short periods of time. Services will generally range from overnight to 3-5 day lead times (short lead times being more expensive). The express providers specialise in operating their own dedicated freight aircraft between hub and spoke airports, where consignments can be 'cross docked' onto connecting flights in short periods of time. Flights generally operate each night, meaning access to airports with minimal night-time flying restrictions is important. Access to transit shed capacity close to airports, in order to handle/sort cargo before, after and between connecting flights, is also a vital requirement. Initial collection from shippers and final delivery to receivers will be undertaken by road transport (often under the providers own livery/branding).

Section 8.2: Airfreight Statistics

8.8 The tables below shows airfreight volumes for 2013 for the five main airfreight airports in Great Britain. For the reasons noted above, the long haul (inter-continental) scheduled airlines are the dominant carriers in the bellyhold segment, 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).

8.9 The tables also show that Stansted and *East Midlands* airports dominate the *express service* sector (accounting for 70% of freight conveyed on dedicated freight aircraft). In addition to their excellent locations relative to key origins and destinations of cargo and connections to the strategic highway network, both airports offer minimal night-time flying restrictions along with historic availability of land close-by on which transit shed capacity could be developed.

Table 8.1: Airfreight Handled at Major Airports 2013

	Tonnes lifted												
	EU				Other International				Domestic				TOTAL
	Scheduled		Charter		Scheduled		Charter		Scheduled		Charter		
Airport	Passenger	Cargo	Passenger	Cargo	Passenger	Cargo	Passenger	Cargo	Passenger	Cargo	Passenger	Cargo	
Gatwick	1,706		906	8	87,914		5,770	4	416				96,724
Heathrow	49,287	2,592	1	36,135	1,302,615	30,665	80	106	1,459				1,422,940
Stansted	3,403	1,717	52	60,483	1,119	65,079	2	78,615	3			1,480	211,953
Manchester	2,204		390	6,076	75,687	4,429	3,529	3,191	122		4	749	96,381
East Midlands				166,044			1	58,242	14			42,666	266,967

	Tonnes lifted		
Airport	Passenger	Cargo	TOTAL
Gatwick	96,712	12	96,724
Heathrow	1,353,442	69,498	1,422,940
Stansted	4,579	207,374	211,953
Manchester	81,936	14,445	96,381
East Midlands	15	266,952	266,967

Source: CAA

Section 8.3: Airfreight at East Midlands Airport

8.10 East Midlands Airport (now part of the Manchester Airports Group) is located at Castle Donington, Leicestershire (North West Leicestershire). It has a single runway 2,893m in length which also permits night-time flying. Airfreight within the East Midlands Airport boundary (i.e. providing direct 'air-side' 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.

8.11 In addition, a number of logisitcs 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.

8.12 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 6.2: 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%

9. SUMMARY AND CONCLUSIONS

9.1 *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).

9.2 Section 2 described how 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. Section 2 also described that there are basically two types of distribution centre when defined by their functions and hinterland; *National Distribution Centres (*NDCs) and *Regional Distribution Centres (RDCs).*

9.3 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. 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. The provision of strategic distribution sites which are competitive and attractive to the logistics market will play a crucial role in this overall process.

9.4 The key conclusion to be drawn from the combined analysis presented in this interim report is the importance of the logistics/distribution sector to the sub-regional economy. 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. 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.

9.5 This position was evidenced by the analysis undertaken in Section 4 (warehouse floor space) and Section 6 (Employment). Section 4 showed that a significant quantum of large scale warehouse 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 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.

9.6 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.

9.7 This position is further evidenced by the economic and employment analysis undertaken in Section 6. 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.

9.8 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)[11]. The same dataset also shows that GVA attributable to

[11] Source: ONS - GVA by Industry Type at LEP Area Level, April 2014

wholesale/retail, transport/storage and food activities was £3,794 million or around 21% of the LLEP area total.

9.9 Section 5 described how new commercially attractive strategic logistics sites are considered to be ones which meet the following criteria:

- Good connections with the strategic highway network;
- 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.

9.10 Section 7 described how national planning policy (Draft National Planning Statement for National Networks) is promoting the development of large scale strategic logistics facilities greater than 60ha which are connected to both the highway and road networks. Known as *Strategic Rail Freight Interchanges (SRFIs)*, they are classed as nationally significant infrastructure projects. Further, the National Planning Policy Framework 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. In this case, it essentially expects large scale distribution to be located within SRFIs (see above). It also encourages solutions which support reductions in greenhouse gas emissions and reduce congestion.

APPENDIX 1: GLOSSARY

Leicestershire – a County in the East Midlands which in local Government terms comprises the City of Leicester unitary authority along with those parts of the county administered by Leicestershire County Council and the seven district councils.

RoRo – roll-on roll-off. The method of shipping whereby unit loads are 'rolled' onto and off shipping vessels. Generally includes driver accompanied or unaccompanied HGVs along with container units in trailers. The main method of importing finished/consumer cargo from mainland Europe or Ireland.

LoLo – lift-on lift-off. The method of shipping whereby unit loads are lifted onto or off shipping vessels. Generally covers standard dimension maritime containers lifted to/from vessels using quayside gantry cranes. The main method of importing finished/consumer cargo from non-European origins (so called 'deep-sea' origins), particularly the Far East.

The golden triangle – the southern part of the East Midlands region that historically became the competitive 'location of choice' in both supply chain cost and performance terms when sourcing and distributing on a national basis. In terms of boundaries, there is no one standard definition of the 'golden triangle'. It may be referred to as the area bounded by the M1, M6 and M69 (narrow definition), albeit that others consider it to be a larger area broadly enclosed by Milton Keynes, Birmingham and Nottingham (along the M1 and M6 corridors).

GB Freight Model – A freight transport model developed by MDS Transmodal, and used for analysing current and forecasting future freight flows to, from and within Great Britain by mode, origin/destination, routing and commodity. It has been audited by the DfT and used to inform a number of their studies, and it was also employed on the East Midlands Strategic Distribution Study (for the former EMDA) to forecast land use requirements going forward. It has recently been used to produce updated rail freight forecasts for Network Rail.

Intermodal – Generally refers to the transport of cargo by more than one mode between origin and destination. It usually involves goods loaded into some form of container unit (e.g. deep-sea maritime container) which can be conveyed by trains, shipping vessels and heavy goods vehicles (HGVs). Transfer between modes is undertaken at a depot/terminal using either gantry cranes or mobile lifting equipment.

Yield – The annual percentage return which is considered to be appropriate for a specific valuation or an investment, being expressed as the relationship between the annual net income (actual or estimated) and the capital value. It is a measure of an investor's opinion about the prospects and risks attached to that investment. The better the prospects and the lower the risks, the lower the expected yield and thus the greater the capital value.

Grade A – A new building which will be finished to a good specification in order to meet the demands of premier occupiers. It will be likely to command higher rents than the sector average for the area.

CAGR (Compound Annual Growth Rate) – The year-over-year growth rate over a specified period of time. It is an imaginary number that describes the growth rate if it grew at a steady rate. You can think of CAGR as a way to smooth growth rates. The compound annual growth rate is calculated by taking the n^{th} root of the total percentage growth rate, where n is the number of years in the period being considered.

3PL – Third party logistics operator. An organisation that provides logistics services to shippers on a contract basis.

APPENDIX 2: STUDY TERMS OF REFERENCE; PART A

Review and Research

Engage with the strategic distribution industry and review existing research (see Appendix 1) and policy from appropriate national, regional and local contexts to provide a narrative and evidence based commentary on the sector to include:

Performance & Function

a. A definition & description of the strategic distribution sector.

b. An analysis of the performance & function of the strategic distribution sector, its critical importance to UK Plc and its contribution to GVA and jobs – nationally, regionally and locally.

c. The identification of supply chains and an assessment of the relative importance & impact of strategic distribution to other sectors (particularly LLEP priority sectors) in Leicester & Leicestershire.

Location & Property

d. Location characteristics & requirements of the sector– optimal location between suppliers and markets, modal flexibility, labour supply, infrastructure access (road / rail / air freight / port).

e. A profile and explanation of the 'Golden Triangle' – its advantages / disadvantages and future influence on growth & spatial choices for the sector.

f. The operating needs of the sector to 2031 (and indicatively to 2036); focusing on strategic highway and rail access, environmental and planning constraints, development site requirements, operating requirements.

g. The variety of property needs for the sector because of the different types of operator and operations e.g. unit size, plot ratio / configuration, property lifespan, ancillary & complementary land uses, "churn", relocation / in-situ renewal trends.

h. Role and influence of rail & Strategic Rail Freight Interchanges for parts of the sector (and why not for other parts) – progress on achieving modal shift in the sector / region.

i. The operating synergies between rail-served and non-rail-served strategic distribution sites.

Employment & Labour

j. An analysis of the strategic distribution sector as an employer - job No's / density, occupational type/s, skill / qualification levels, training, pay, contractual arrangements and any specific local traits.

k. An assessment of the labour catchment / TTWA for the sector and any specific local labour supply / demand issues.

l. An understanding of the training requirements and provisions of the sector including the delivery of apprenticeships.

Policy Context

m. An assessment of the strategic policy context (spatial planning, economic) affecting the sector – national, regional (East / West Midlands), Golden Triangle / adjacent LEP & LPA areas.

n. Future challenges facing the sector e.g. climate change, congestion, modal shift, retail trends and consequent spatial planning implications.
o. An understanding of the wider transport and freight policy context (incl. rail, sea port, road) for the sector and its influence over the development of the sector in Leicester & Leicestershire.

APPENDIX 3: E-TAILING REPORT (SAVILLS)

E-tailing & the impact on distribution warehouses

April 2013

SUMMARY

■ E-tailing continues to grow at pace within the UK, with record percentages of total retail sales now coming from online. To combat this change, the traditional 'high street' retailers are being forced to reconfgure their supply chains to cater for this new era of multi-channel retailing.

■ This report identifes the current and future trends in e-tailing and how the inevitable changes will impact upon the distribution warehouse sector and its future growth.

■ Savills commissioned Transport Intelligence to undertake an in-depth analysis of the online retail sector, including face-to-face interviews with retailers to understand issues including the points at which retailers are 'triggered' into expanding their warehouse facilities, as well as, their preferences both in terms of location and confguration of the space.

■ From the research and analysis, Savills believe that warehouse take-up, by retailers only, will total 50 million sq ft over the next fve years and that is 21% up on take up in the last fve years. 13 million sq ft of this future take-up will be within e-tailing specifc property, driven by online sales.

■ With specifc needs from retailers and a shortage of stock, there will be a bias towards more pre-letting in the UK and an increased reliance on development sites.

■ This paper summarises a larger and more comprehensive report from the interviews and the survey. Hence the bullet point style of this overview. To obtain a copy of the full report, please contact Richard Sullivan or Steven Lang.

"E-tailing will help drive a new era of demand for warehouse space... although one size will not ft all" Richard Sullivan, National Head of Industrial & Logistics

The market today

- On-line retail sales are roughly 10% of total retail sales today and are expected to double over the next decade. The knock on effect for the logistics market will be signifcant and demand for distribution warehouses will be driven increasingly by the needs of the e-tailing market.

- The Transport Intelligence/Savills research targeted the key players in the e-tailing market and was purposely aimed at the occupiers of distribution warehouses. A detailed interview process and a wider survey were completed.

- Transport Intelligence's expertise lies within the logistics process and has enabled Savills to have a clearer understanding of the key factors affecting property within the e-tailing sector.

- The businesses interviewed included the 'traditional' retailers such as supermarkets and department stores as well as retailers that rely much more heavily on the online consumer market.

- The other main group of respondents was 'logistics providers', including express parcel companies and 'e-fulflment' players that include Amazon, Norbert Dentressangle and iForce.

- Graph 1 illustrates the increasing sales growth expected for the next 12 months from the survey/interviews.

- A quarter of retailers expect e-tailing growth to increase by a further 25% during the next 12 months, compared to 20% of logistic providers.

- As shown in Graph 2, there are varying levels of e-tailing related sales. Although interestingly, nearly 40% of retailers have less than 5% classifed as e-tailing and this demonstrates there is room for signifcant growth within their e-tailing businesses.

- The majority of respondents operate one warehouse (Graph 3). At the other end of the scale, 9% operate between 11 and 100 warehouses at present.

The players

- The analysis has been split between the retailers and the logistic providers.

- 20% of the retailers operate from a dedicated e-fulflment centre at present, compared to 36% of logistic providers. It is unsurprising that more retailers operate a multi-channel facility, but investment in dedicated e-fulflment will increase in the future.

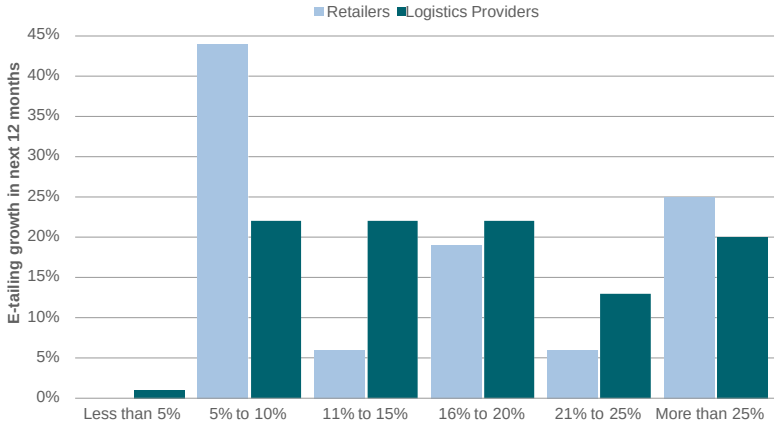
- The 'trigger' point for a dedicated e-fulflment centre is the key statistic. For the retailers, when the space required is between 10-25,000 sq ft, then a dedicated centre is adopted, on average.

- A discussion with one major e-fulfller for small/medium retailers said that warehouses range between 20,000-60,000 sq ft. They also said that the 'tipping point' for a new dedicated e-fulflment centre, assuming a standard parcel size, is 200,000 on-line orders.

- The 20-60,000 sq ft range mentioned above does not sound a signifcant amount of space, but should be put into the context of the fact that three-quarters of retailers currently operate from 10,000 sq ft or less. It is not all about the big retailers in this growth market.

GRAPH 1

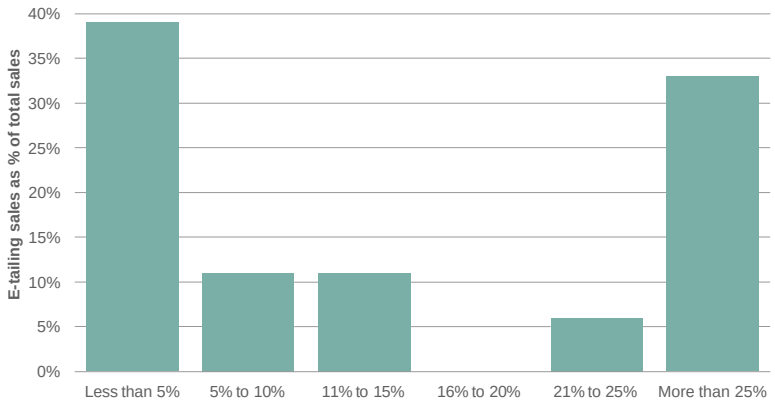
E-tailing sales growth predictions for next 12 months



Graph source: Transport Intelligence / Savills

GRAPH 2

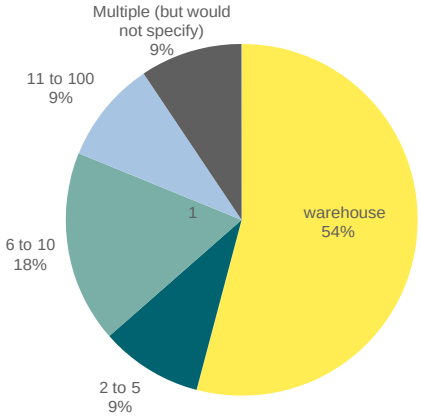
Retailers' e-tailing sales proportions



Graph source: Transport Intelligence / Savills

GRAPH 3

Respondents' current warehouse portfolio



Graph source: Transport Intelligence / Savills

■ The question for the property market is how can this type of space be catered for? Savills view is that there will be an increase demand on more 'traditional' industrial estates close to, or within, urban centres. These offer good security and can be more cost effective for smaller companies.

■ Within older industrial estates, there is a potential to 'breathe new life' into warehouses that could be viewed as redundant, particularly in close proximity to towns and cities. Indeed, this view is supported by the speculation of Amazon establishing a 'satellite' depot of 75,000 sq ft in Croydon. This will support their large warehouse network around the country with further requirements out amounting to 3 million sq ft.

■ The interesting strategies that have emerged are related to the fnal delivery to the customer ('last mile'). 'Dark stores' have generally dominated the headlines, where the warehouse function replicates a supermarket store, without the frills or customers. 'Pick and pack' functions are very effcient from this type of operation. Tesco have six 'dark stores', including one in the pipeline. As well as being in Park Royal, Waitrose e-tailing warehouse is planned in Croydon of approximately 80,000 sq ft.

■ One of the pioneers of the fulflment sector in the UK, Ocado, have announced the imminent opening of a £210 million centre near Tamworth, West Midlands. Stock has been received and live customer orders processed. Recently, there have also been discussions between Ocado and Wm Morrison, UK's 4th largest supermarket, regarding its UK e-tailing expansion.

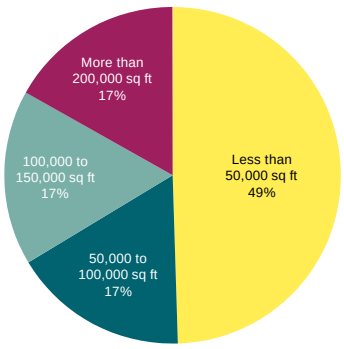
■ 'Click & collect' has grown in importance for major retailers, including Argos and, more recently, John Lewis. The logistic providers are expanding their operations in this area including UPS launching Access Point with 1,500 collection locations by mid-2013 and CollectPlus (PayPoint/Yodel) with 4,700 local corner shop collection points. These are yet another link in the UK e-tailing logistics market.

■ For the logistic providers, some companies have grown signifcantly during the past few years and leaders in the e-tailing sector have emerged.

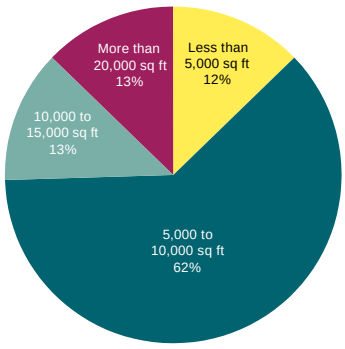
GRAPH 4

E-tailing foorspace for retailers

Average size of dedicated e-fulfilment warehouse



E-tailing foorspace allocation within multi-channel warehouse



Graph source: Savills

■ One to watch, is iForce, who employ around 600 staff and occupy 1.1 million sq ft of warehouses. Key clients include John Lewis Direct, Cath Kidston and Tesco. iForce offer innovative processes and technologies for the e-tailing world. A key question is how the outsourced e-tailing providers will expand in the future.

■ As shown in Graph 4 above, the smaller warehouse dominates for retailers. Even within a multi-channel warehouse, the foorspace allocated, for the majority, is quite small. This will grow in the future and emerge as smaller warehouse requirements, as we have seen in the recent past.

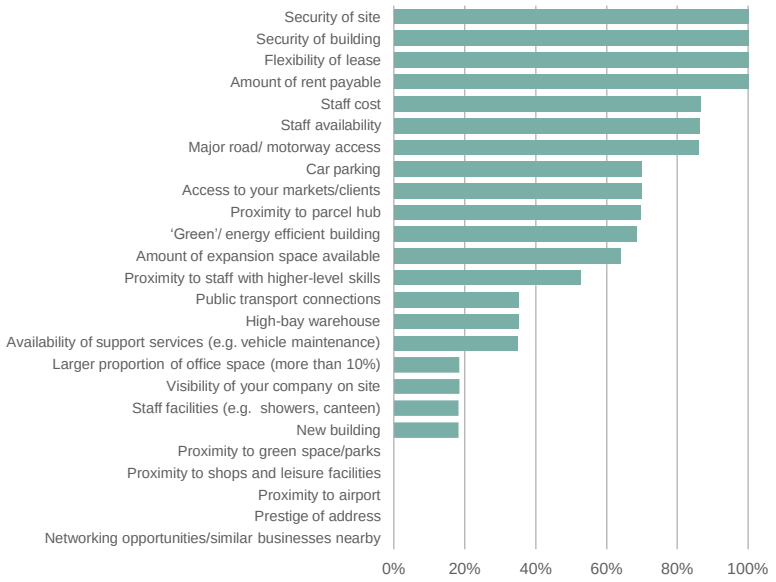
What do occupiers want?

■ Graph 5 below presents a Savills survey response to the preferences for future warehouse property features, irrespective of whether they are for e-tailing or not. The percentage represents the proportion that placed a 'high' importance on the factor.

■ Security is a major issue for the retailers. Lease fexibility and cost are of equal importance, which comes as no surprise. The more interesting result is the lower importance on the high-bay and new buildings. These issues are covered in more detail within the larger report, which accompanies

GRAPH 5

E-tailing retailers' preferences



Graph source: Transport Intelligence / Savills

this paper.

- Graph 6 shows the relative importance of key factors in locating a distribution warehouse for e-tailing.

- The percentages represent the proportion of respondents that assigned a 'high' level of importance. As with other surveys done in the past, there are not any surprises in the top rated factors. Occupational costs and labour are key.

- However, it is more interesting to see that logistic providers place a higher importance on 'higher skilled' workers. This is due to the IT intensity of their warehouses. However, Savills do not expect a signifcant change in locational requirements going forward as a result.

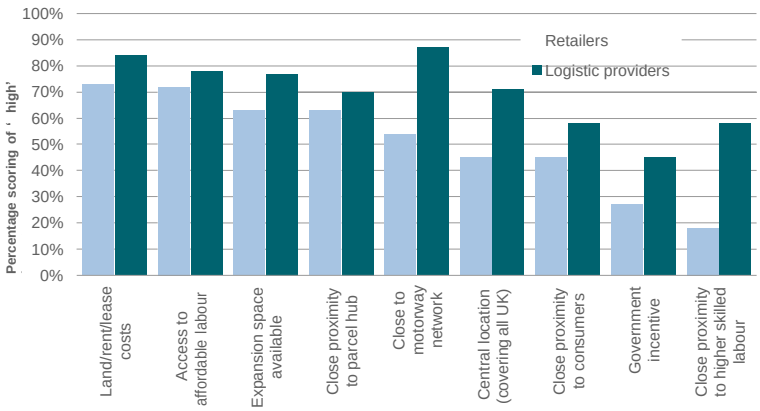
Outsource or not?

- The results from the research show that third-party logistic (3PL) providers have adopted the attitude that their e-tailer customers will follow their traditional 'high street' counterparts. However, 18 of the top 20 e-tailers in the UK operate their distribution centres in-house.

- From the extensive industry interviews, the systems required for e-tail operations are very different from those in the traditional retail market. One view from the interviews is that, so far, the 3PLs have not invested in developing bespoke solutions. Instead, smaller, specialist, companies are emerging, targeting the unique demands of e-tailers.

GRAPH 6

What factors are most important for locating an e-tailing distribution centre?



Graph source: Transport Intelligence / Savills

Changing distribution model

- Savills review of the top 150 retailers shows that 10 are pure internet, with sales around £6 billion. Twenty-seven do not sell on the internet, mainly value retailers and smaller grocer groups. The remaining 113 are both 'bricks & mortar', i.e. have a high street/shopping centre presence and e-tailing operations.

- The physical 'high street' presence today will continue to evolve and e-tailing will complement the in-store offering. However, retailers must ensure that stock and product choice remains as comprehensive on the 'high street'.

- Graph 7 below shows two views of how the distribution model will change. Most logistic providers expect existing physical stores to stay and smaller warehouse fulflment centres to emerge. This would favour 'click & collect'. Retailers expect that centralised UK e-fulflment centres will emerge, perhaps the same larger warehouses that they are used to.

- From a property perspective, the continuation of a centralised model reinforces the need to maintain a supply of the largest warehouses and development sites.

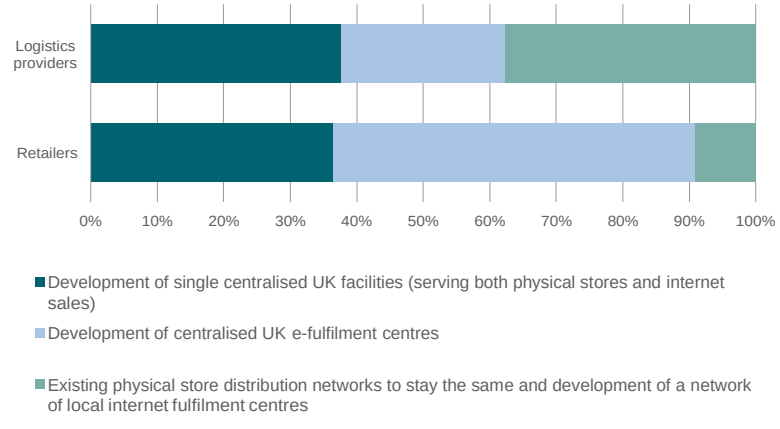
Where to locate?

- The East Midlands emerged as a clear favourite in terms of locating a future warehouse. 43% suggested this as their preferred location. Greater London was the frst choice for 17%.

- Labour availability, proximity to customer base and parcel hubs are

GRAPH 7

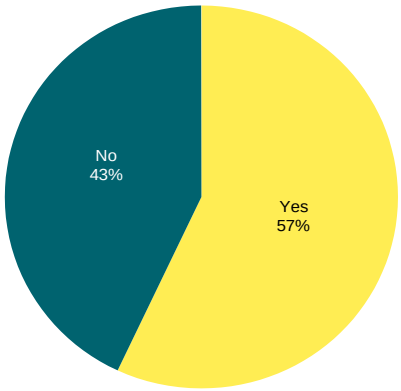
How will the distribution model change?



Graph source: Transport Intelligence / Savills

GRAPH 8

Have retailers considered a dedicated e-fulfilment centre in the near future?



Graph source: Transport Intelligence / Savills

all obvious locational factors for the e-tailing function. However, Savills don't believe that any of these key factors would necessarily constrain many UK locations and occupiers remain relatively footloose.

■ Other factors that are of 'high' importance to retailers include the security of site/building, fexibility of the lease, rent and staff costs.

Warehouse specifcation

■ For the e-tailer, nearly half (49%) of dedicated e-fulflment warehouses are less than 50,000 sq ft. This compares to 31% for logistic providers.

■ Within a multi-channel warehouse, 62% of retailers allocated 5-10,000 sq ft to e-tailing. As mentioned earlier, the majority of e-tailers establish a dedicated centre when this level reaches 10-25,000 sq ft.

■ Will we see the revival of a modern e-tailing industrial estate? Could there be an asset management play on older industrial sites to provide secure, smaller, low-rise warehouses on the edge of town/city centres. Plenty of this stock exists today and is likely to be under-priced!

■ Finally, the occupiers were asked what additional rent they would pay for the 'ideal' warehouse for their e-tailing futures. The short answer, nothing. Developers/owners beware. Providing the right product will reduce voids, but they shouldn't be overly specifed so that rental levels are above market rate.

■ More information regarding the specifcation of warehouses is included within the main report. Please see contacts below for a copy. ■

Savills Industrial & Logistics Agency

Market-leading leasing, sales and investment advice to occupiers, developers and investors.

Getting more and better value from industrial property requires accurate, up-to-date research and a high level of commercial awareness. Our industrial experts make use of our national network and dedicated research team to offer both. We offer extensive market knowledge across the UK and bring a wealth of experience to deliver innovative solutions for our clients. With teams in all the main regional cities we provide market leading services.

OUTLOOK

How will the market evolve?

■ The replacement of the high street with warehouses/home delivery is an extreme view and unlikely. 'Click & collect' will maintain high street and out-of-town presence. Overall, the warehouse will have an increasingly important role going forward within retailers' supply chains.

■ There will be an increasing number of players in the e-tailing market. Savills expect at least one new entrant to the market to compete with Amazon. Can we see eBay or Google warehouses on the horizon?

■ Dealing with returns is key for all aspects of the supply chain. Minimising costs, waste and maintaining customer satisfaction all need to be considered simultaneously. Logistic providers will support this function, but will require appropriate warehouses, including location and specifcation.

■ The large retailers and logistic providers will continue to drive the market, in terms of the demand for retail-related distribution warehouses. However, the niche logistic providers need to be monitored by the property industry. Savills have also reviewed, and researched, those retailers that are expected to drive the market going forward.

Please contact us for further information

Transport Intelligence

Leicester and Leicestershire Strategic Distribution Sector Study

Part B Interim Report

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

MDS Transmodal Ltd
Savills

November 2014

Ref: 213063r_Part B_Final

CONTENTS

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 are to enable a better understanding of the sector and objectively determine future need, together with managing change and supporting sustainable economic growth. The completed study will recommend a strategy to enhance the area's current competitive advantage in the strategic distribution sector, and it will ultimately inform LLEP plans/strategies and the development of future local plans across Leicestershire[1].

1.2 The study is being 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 Leicestershire.

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 This document forms the formal written report covering *Part B* of the study (the requirements of Part B, taken from the study Terms of Reference, are detailed in Appendix 1). It concerns planning for change and growth, including forecasts of future land requirements for strategic distribution in Leicestershire. Both the Part A and Part B reports will

[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.

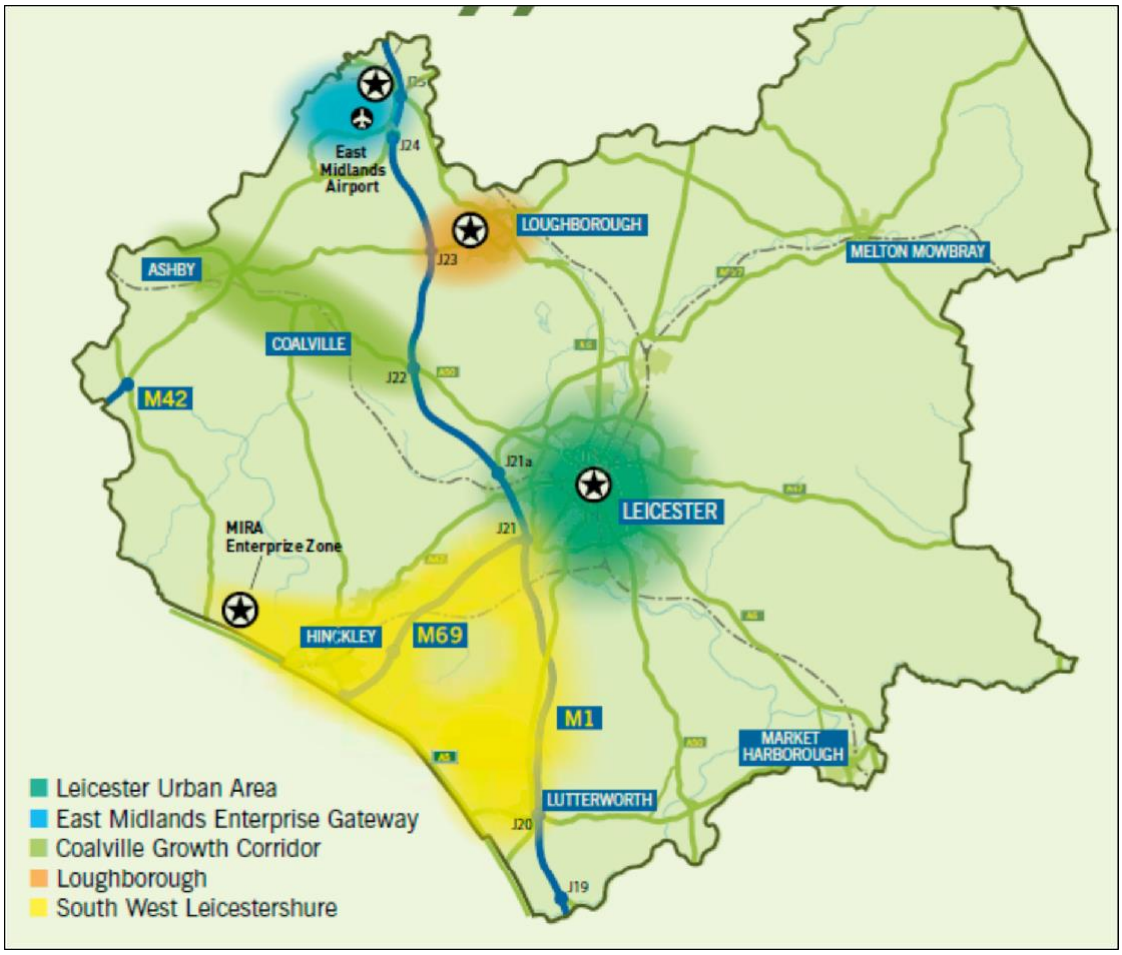
subsequently inform Part C of the study – developing a strategy. In brief, this Part B report covers the following elements:

- An overview of the key challenges and threats facing the strategic distribution sector;
- Undertakes forecasts of future freight flows to/from large scale warehousing in Leicestershire and the East Midlands;
- Forecasts future demand for large scale warehouse floor space in Leicestershire and the East Midlands, and hence the quantum of land likely to be required up to 2036;
- Assesses the quality and quantity of existing sites with B8 consents or in the planning pipeline (site supply), and hence identifying the need for additional land to come forward up to 2036;
- Recommends key 'areas of opportunity' where future new large scale warehouse floor space should be located; and
- Undertakes, at a strategic level, the likely economic and employment benefits associated with the land use forecasts.

1.5 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.

1.6 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 Gross Value Added (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



1.7 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. KEY THREATS AND OPPORTUNITIES FACING THE STRATEGIC DISTRIBUTION SECTOR IN LEICESTERSHIRE

Section 2.1: Challenge from Other Regions and Port Centric Logistics

2.1 The Part A report demonstrated that the 'golden triangle'[2], of which the Leicestershire sub-region is central, 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. A high concentration of warehouse floor space has subsequently been developed in the Leicestershire sub-region and the East Midlands region, the quantum identified being significantly larger than required to serve regional demand (see Part A report for the detailed analysis and data). The three main reasons explaining this competitive position were identified, as follows:

- The 'golden triangle' is 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 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.

2.2 However, market conditions can and do change over time. 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) can be identified, namely:

[2] As per the Part A report, this study has taken the broader definition of the 'golden triangle', namely the area broadly enclosed by Milton Keynes, Birmingham and north Leicestershire (along the M1 and M6 corridors). In regional terms it therefore straddles the East and West Midlands, albeit most of the area is within the East Midlands region.

- The emergence of competing inland locations/sites outside to the north and east of the 'golden triangle', in particular in the north Midlands, South Yorkshire and the East of England, which to date have not been associated with national distribution; and
- The development of B8 land within port estates (so called port centric logistics) which is intended to serve a national market.

2.3 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.

2.4 As will be demonstrated further below, the key to addressing both of these challenges, 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).

Competing Sites to the North and East of the Golden Triangle

2.5 While the main logistics strategy adopted by the major national distributors is likely to remain as per the 'golden triangle' model described in the Part A Report i.e. goods flowing from NDCs to RDCs and then to end users, potentially the preferred inland location of the NDCs could migrate away from the golden triangle to other regions.

2.6 Former colliery and heavy industrial sites are being released for B8 development in areas to the north and east of the golden triangle (e.g. former coalfields of north Nottinghamshire and South Yorkshire etc.). Local authorities are often promoting/supporting the regeneration of such brownfield sites for job creation and remediation purposes. Examples include:

- Markham Vale, close to M1 Jct 29a near Chesterfield. The development comprises around 80ha, non rail-served; and
- Rossington Inland Port, near Doncaster. A rail-served site (in planning terms a *Strategic Rail Freight Interchange* or *SRFI* – see Part A report) offering around 500,000 sq metres of floor space and an intermodal terminal.

2.7 The Rossington Inland Port site has excellent rail connections (generous loading gauge, direct links to deep-sea ports etc..), large plots for units up to 100,000 sq metres and will be served by a new road link from the A1. However, many of the other sites being promoted are either not rail-served (e.g. Markham vale) or if rail-connections are available (e.g. it is a former rail-served colliery) they are unsuitable for large scale rail-served warehousing. This being due to their total size and configuration (not being of a scale capable of generating multiple daily

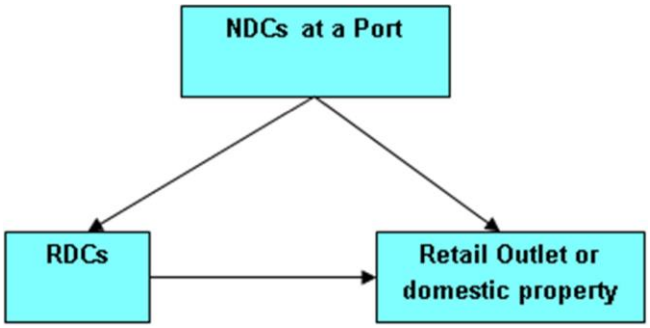
train services or the large plots now required by the market) along with the overall quality of the rail connections (such as poor loading gauge for intermodal traffics). Further, such sites are not ideally located in relation to the main deep-sea and Channel ports and domestic suppliers, and are located more distant from London and the South East (the largest onward distribution market for retail/consumer cargo). Inbound and outbound transport costs are therefore likely to be higher when compared with the golden triangle. Their attractiveness to the logistics market, however, is based on the following:

- Highly competitive rents compared with the 'golden triangle' (partly due, in many cases, to public sector contributions to the cost of site regeneration);
- Lower labour costs, being located in areas of high unemployment.

2.8 Occupiers may therefore seek these lower costs sites (at the expense of higher transport costs – inbound and outbound) given that commercially attractive sites in the Midlands might not be available.

Port Centric Logistics

2.9 The increasing sourcing of goods from eastern European and Far Eastern manufacturers suggests a 'port centric' approach' for some players in the market. This is illustrated in the flow diagram below.



2.10 The port centric model involves NDCs being located within or very close to port estates so that they can be directly served from the quay without use of public road network. As per the logistics strategy adopted by the major national distributors, outbound flows are direct to retail outlets or RDCs. When the great majority of cargo handled through a NDC is imported, it can make economic and logistical sense to store that cargo at a port, rather than transporting it to the Midlands only to re-distribute a substantial proportion back to the South East coastal regions through which it has just passed through. The port centric model

therefore removes a 'transport leg' from the supply chain (i.e. the inland haul from port to NDC), thereby saving distributors part of the overall supply chain transport costs.

2.11 Opportunities exist for port centric NDCs at London Gateway, Immingham/Killingholme, Teesport and the Mersey Ports (and with smaller scale schemes potentially available at Felixstowe and Dover). Asda and Tesco have both developed port centric NDCs within the port estate at Teesport (served by feeder vessels from mainland European ports) and further sites are currently available in/near the port. The major port centric opportunity is at the new London Gateway deep-sea container port (which opened for traffic in Autumn 2013), where 150ha of land behind the quay (with B8 consents) is currently available for port centric warehousing, sufficient to accommodate over 800,000 square metres of floor space. Sites 'within' the Mersey Ports estate include Port Warrington, Port Salford and Seaforth (redevelopment of land behind the existing port estate), with the inland sites being served by barge from Seaforth along the Manchester Ship Canal. These are medium-long term developments likely to be brought forward over the next 10-20 years. The Port of Bristol also had plans for a deep-water container berth on the Severn estuary, although recent announcements suggest this proposal has now been put on ice.

2.12 The case for a port centric strategy is therefore essentially based on the following three drivers:

- A potential lack of suitable large sites in the golden triangle, both non rail-linked sites and particularly rail served locations;
- The alternative inland locations to the north and east of the golden triangle (Nottinghamshire, Yorkshire) result in higher transport costs (and increased CO_2 emissions); and
- The ability to receive cargo into an NDC direct from the quay, thereby removing a 'transport leg' from the supply chain (costs and CO_2 emissions).

2.13 This strategy may only be cost effective when the vast majority of inbound traffic is imported via the port in question (the occupier is essentially tied to the port, whereas the golden triangle is broadly equidistant from all the main deep-sea and Channel Ports). This option is therefore potentially uneconomic where a substantial proportion of the inbound cargo handled through the warehouse is imported via other ports (e.g. Channel Ports) and/or from domestic sources.

Addressing the Challenges

2.14 The Part A report (Section 7) reviewed the draft *National Planning Statement (NPS)*, and in particular the provisions contained in the draft NPS with respect the development of *Strategic Rail Freight Interchanges (SRFIs)*. SRFIs are defined in the NPS as large multi-

purpose freight interchanges and distribution centres greater than 60ha which are linked to both the rail and trunk road system. DIRFT is an example of a current SRFI in the East Midlands region. Smaller developments (i.e. below the 60ha threshold) and individual warehouses can also be both road and rail-linked.

2.15 In all cases, it is important to appreciate that such facilities are essentially road-based distribution sites which are also rail-served, and the majority of cargo (in terms of tonnes lifted) can be expected to move by road. However, locating strategic distribution activity at such rail-served sites (e.g. at SRFIs) also allows cargo to be loaded or discharged directly from railway wagons without the need to use any intermediate road transport. This offers the market 'modal choice' and allows a proportion of the cargo to arrive/depart by rail where it offers a cost competitive solution.

2.16 Consider rail freight operating costs, which are around £11 per train km on a gate-to-gate basis for a standard intermodal train. For a trip of 250km to a NDC located on a rail-served logistics site (e.g. DIRFT) and assuming 30 container units per train, the train operating costs per unit would be approximately £92 i.e. (250km x £11)/30 containers. Terminal lift and shunting charges at both ends would amount to around £90 per unit (e.g. lift container unit to train at origin port, and then lift and shunt container unit to on-site warehousing at the rail-served inland logistics site), meaning that total door-to-door delivery costs would be around *£182 per unit delivered*.

2.17 If the inland destination NDC is not rail-served, a road haul via the public highway network is required to transfer the container unit to/from a suitable rail terminal (e.g. from DIRFT to Magna Park). In this case, terminal lift and local road haul charges would be around £220 per container unit (£150 per road haul). Total door-to-door delivery costs to the non rail-served NDC would therefore be around *£312 per unit delivered* – a significant premium over the rail-served destination. This additional transport leg (and handling) adds costs into the supply chain, thereby rendering rail more expensive when compared with road transport operating directly from origin to destination (except for long distance flows). The equivalent road haulage costs from direct port to inland destination (either rail/non rail-served) would be around *£300 per unit delivered*.

2.18 Consequently, where cargo flows are from a rail connected origin e.g. deep-sea container port to a rail-connected distribution centre or between rail-served warehouses (no road hauls), rail freight generally is always cost competitive compared with road transport over any distance given adequate volume to fill a daily full-length train. However, where one end of the trip is not rail-served, e.g. deep-sea container port to a non rail-connected distribution centre or between warehouses where only one is rail-served (and therefore requiring a road haul from a suitable rail terminal), rail freight generally becomes cost competitive with road transport at distances over 250km. Where both ends are non rail-served (i.e. a road haul is

required at both ends of the journey), rail freight generally becomes cost competitive at distances over 400km.

2.19 The above can be considered further by 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 in the previous sub-sections. We have therefore considered a hypothetical 80,000 sq m (860,215 sq ft) NDC located in the golden triangle, South Yorkshire and at London Gateway, and estimated the annual costs of distributing cargo from ports/domestic suppliers via the NDC to RDCs nationally at each location. In the case of the golden triangle and South Yorkshire, NDCs at road and rail-served sites and at road only connected sites are both assumed (London Gateway being road and rail-served).

2.20 The estimated annual operating costs for a NDC at each location are shown in the table below. It is assumed that there is no warehouse rental 'premium' for a site which is both road and rail-served when compared with a site which is only road-linked.

Table 2.1: Estimated NDC Annual Operating Costs

	Golden Triangle	South Yorks	London Gateway
Floor space (sq m/sq ft)	80,000/860,215	80,000/860,215	80,000/860,215
Rental per sq ft	£6.50	£5.00	£8.00
Annual Rental	*£5.6 million*	*£4.3 million*	*£6.9 million*
Wage rate/hr	£8.50	£7.50	£10.00
Full time employees (140 sqm per FTE)	571	571	571
Annual wages	*£15.8 million*	*£13.9 million*	*£18.5 million*
Management and overheads (20% of rental and wages)	*£6.6 million*	*£5.7 million*	*£7.9 million*
Total annual costs	**£25.6 million**	**£21.8 million**	**£30.5 million**

Source data: consultants estimates and calculations

2.21 Given the lower rental and wages rates in South Yorkshire compared with the golden triangle, the annual operating costs of a warehouse of this size are around £4 million lower (albeit the golden triangle is more competitive than London Gateway, given its higher rental and wage rates). However, this is only part of the equation, and inbound and outbound transport costs need to be accounted for. This is also possible to estimate using a cost model approach for a number of operating scenarios[3], and these are shown in the table below.

[3] The GB Freight Model incorporates road and rail cost models which allows transport costs by mode to be established.

Table 2.2: Estimated per Unit Transport Costs

Flow	Transport Costs (£ per HGV equivalent unit)
Felixstowe to golden triangle NDC – road only site[1]	£319
Southampton to golden triangle NDC – road only site [1]	£314
Felixstowe to golden triangle NDC – rail-served site	£189
Southampton to golden triangle NDC – rail-served site	£184
London Gateway port centric NDC	£50
Felixstowe to South Yorks NDC – road only site [1]	£334
Southampton to South Yorks NDC – road only site [1]	£347
Felixstowe to South Yorks NDC – rail-served site	£204
Southampton to South Yorks NDC – rail-served site	£217
Dover to Golden Triangle (HGV)	£336
Dover to London Gateway (HGV)	£262
Dover to South Yorks (HGV)	£465
Domestic to/from golden triangle – rail-served site[2]	£202
Domestic to/from golden triangle – road only site[3]	£204
Domestic to/from London Gateway[2]	£257
Domestic to/from South Yorks – road only site[3]	£263
Domestic to/from South Yorks – rail-served site[2]	£250

Source data: consultants estimates and calculations

1. By rail to local rail terminal in the first instance, then local road haul to NDC
2. Mean cost weighted by cargo origin/destination, using road or rail whichever is lowest cost
3. Mean cost weighted by cargo origin/destination, using road only

2.22 Note that in general, inbound transport costs to rail-served sites from the deep-sea ports are considerable lower when compared with a road only location (further demonstrating the analysis above and partly explaining why occupiers are now seeking rail-served sites). Serving a warehouse direct from an on-site intermodal terminal is significantly more cost efficient than a local road haul to a road only warehouse.

2.23 However, the important conclusion to note from the above analysis is that inbound transport costs from the deep-sea ports to a rail-served golden triangle site are considerably lower when compared with a road only site in South Yorkshire (where a local road haul would be

required from a suitable rail terminal e.g. Doncaster to the NDC). Even for a rail-served site in South Yorkshire, the golden triangle offers marginally lower rail costs given it is less distant to the deep-sea ports. Also note that for port centric facilities, inbound transport costs from the quay are significantly lower.

2.24 Further, for imported cargo via the Dover Straits using accompanied road haulage, transport costs to the golden triangle are significantly lower when compared with South Yorkshire given the reduced distances involved. Likewise, domestic distribution to/from the golden triangle is more competitive when compared with South Yorkshire and London Gateway. The golden triangle is therefore more centrally located in relation to the main domestic sources of cargo and the main onward distribution markets for retail/consumer cargo.

2.25 Using these figures, the annual inbound and outbound transport costs to/from our 80,000 sq metre NDC can be estimated for different scenarios (an 80,000 sq metre NDC can be expected to receive and despatch around 51,000 HGV equivalent units per annum). In this case, the following scenarios have been tested:

- Scenario 1: A NDC exclusively handling deep-sea imported cargo; and
- Scenario 2: A NDC handing cargo from a mixture of sources; deep-sea (10%), EU (25%) and domestic 65%. This represents the broad split by ultimate cargo origin for consumer type goods passing along supply chains.

2.26 Scenario 2 essentially represents the broad origins of general cargo moved within Great Britain currently on a national basis. A typical NDC, in terms of cargo origins, can therefore be expected to fall somewhere between Scenarios 1 and 2.

2.27 Essentially, the number of HGV-equivalent units from each origin has been multiplied by the respective transport rate to estimate total inbound transport costs. In the case of deep-sea traffic, it is assumed that containers will arrive from Felixstowe (60%) and Southampton (40%), except for London Gateway where all containers will arrive via the port. EU imports are assumed to pass through the Dover Straits by accompanied road haulage. The table below shows the results of the exercise.

Table 2.3: Estimated Total Supply Chain Costs

Scenario 1 – Deep-sea

	£ million pa NDC operating costs	Inbound transport costs	Outbound transport costs	**Total costs**
Golden Triangle - rail-linked	£25.62	£16.66	£10.31	**£52.59**
Golden Triangle - road only	£25.62	£28.27	£10.42	**£64.31**
S Yorks - rail-linked	£21.85	£18.70	£12.73	**£53.28**
S Yorks - road only	£21.85	£30.30	£13.40	**£65.55**
London Gateway port centric	£30.51	£5.10	£13.12	**£48.73**

100% deep-sea inbound; 60% Felixstowe, 40% Southampton
Inbound 100% rail, via local terminal and road haul for road only
Internal shunt for London Gateway

Scenario 2 – Deep-sea, EU and Domestic

	£ million pa NDC operating costs	Inbound transport costs	Outbound transport costs	**Total costs**
Golden Triangle - rail-linked	£25.62	£12.65	£10.31	**£48.57**
Golden Triangle - road only	£25.62	£13.88	£10.31	**£49.81**
S Yorks - rail-linked	£21.85	£16.08	£12.73	**£50.66**
S Yorks - road only	£21.85	£17.67	£13.40	**£52.92**
London Gateway port centric	£30.51	£12.37	£13.12	**£56.00**

10% deep-sea inbound;60% Felixstowe, 40% Southampton
Deep-sea inbound 100% rail, via local terminal and road haul for road only
25% EU; all from Dover by HGV

2.28 For the deep-sea only scenario, it can be seen that the port centric solution does indeed generate the lowest cost solution, despite the higher rental and labour costs expected at London Gateway. However, such an occupier would essentially be tied to the port, whereas the golden triangle can be served from all the deep-sea ports (which in practice is likely to be the case given that importers will be using a variety of shipping lines). Importantly, under this scenario a road and rail-served site in the golden triangle is significantly more competitive when compared with a road only connected site in South Yorkshire i.e. the road only connected site in the emerging competing location, which historically has not been associated with national distribution, performs poorly against the golden triangle. There

would also appear to be a benefit (albeit smaller) for the golden triangle when compared with a rail-served site in South Yorkshire.

2.29 A similar picture emerges when handling a mixture of deep-sea, EU and domestic sourced cargo. Again, the road only connected site in the location which historically has not been associated with national distribution performs poorly against the golden triangle. Note how the London Gateway port centric option performs poorly under this scenario.

2.30 This analysis, in general terms, demonstrates the case for rail-served strategic distribution sites (such as SRFIs), as follows:

- A continuing need to develop efficient large distribution centres, much of which is replacing existing capacity, that are well located in relation to cargo origins and destinations in order to maintain and enhance supply chain's competitiveness. Nationally, around 1 million square metres of new warehouse floor space is developed annually. However, the net growth in floor space is significantly lower, meaning that much of the new-build replaces old/obsolete capacity;
- They generate financial benefits to distributors of cargo (as demonstrated above), resulting in a more efficient supply chain and competitive logistics sector – the Economic Case; and
- Sustainability benefits are generated through the modal switch of cargo from road transport to rail freight, principally reductions in the emissions of greenhouse gases but also air quality improvements, fewer road accidents and reduced vehicle congestion – the Environmental Case.

2.31 In a rational commercial market, shippers will only use rail freight (thereby generating the wider environmental/sustainability benefits) when it is able to offer a more cost competitive solution (financial benefits) when compared with road transport. It is only by developing a network of SRFIs that cost competitive rail freight transport solutions can be offered to the market.

2.32 Overall and specifically related to Leicestershire, the important conclusion which can be drawn from the analysis presented above is 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 the sub-region's established competitive advantage, is the development of new commercially attractive strategic sites in the East Midlands which will be directly rail-served (SRFIs).

2.33 Despite this position, there are two important factors to appreciate. Firstly, as noted above 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 as demonstrated above still perform well compared with sites to the north/east of the golden triangle.

2.34 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).

2.35 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 will be discussed in Section 4 below, most new-build floor space is actually replacing existing obsolete capacity. Consequently, this replacement capacity along with the growth build element would migrate to other regions given a lack of sites in the golden triangle. This clearly has GVA and employment implications, which are addressed in Section 7 below.

Section 2.2: Rail Traffic at Golden Triangle Rail-Served Sites

2.36 Section 3 of the Part A report demonstrated strong growth rates in intermodal rail freight up to 2012, both nationally and in Leicestershire and the wider East Midlands region. The freight flow forecasts in Section 3 below will show expected continuing strong growth rates in this sector.

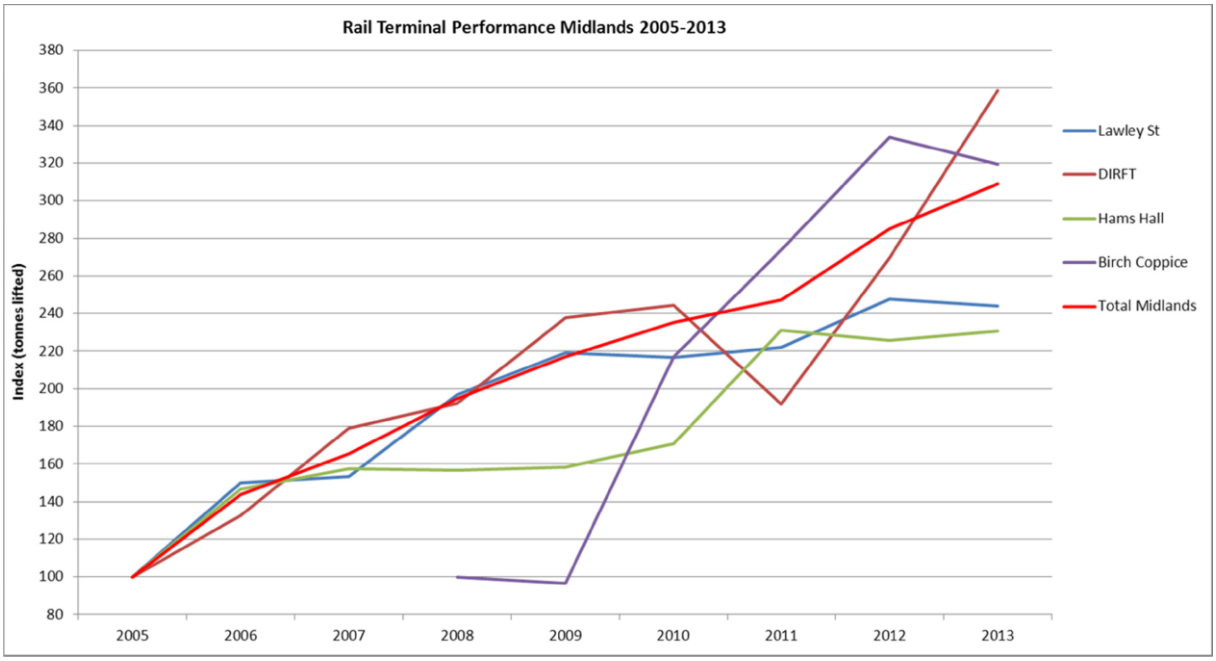
2.37 In terms of specific sites, the analysis below will demonstrate that where SRFIs have been developed they have been successful in attracting rail-based freight (distributors to/from those sites are using rail, and hence have generated the economic and sustainability benefits alluded to), we have considered the volume of cargo handled at the golden triangle's SRFIs since 2005, along with the stand-alone intermodal terminal in Birmingham (Freightliner Lawley Street). *Network Rail billing data,* which is processed by MDS Transmodal, records all rail freight activity by terminal and siding (including gross loaded tonnes of cargo).

Interrogating this data therefore allows the performance of these golden triangle SRFIs/intermodal terminals to be assessed. The graph below therefore compares total tonnes-lifted by rail freight at each site for the years 2005-2013, albeit in index form (due to confidentiality issues, however, the raw data for each site cannot be published). With the exception of Birch Coppice, 2005 equals 100 (noting that Birch Coppice only started handling intermodal traffic in 2008, hence 100 refers to 2008 traffics for that site).

2.38 Three main conclusions can be drawn from this analysis.

- The four sites in total and each of the four sites individually has experienced continual growth in traffic volumes over the period considered (2005 being the first full year that data is available in this current form). The data shows that three SRFIs and a stand-alone intermodal terminal, even though they are in reasonable close proximity to each other, can successfully co-exist and attract traffic;
- Since 2011, both Lawley Street and Hams Hall have effectively 'flat-lined' while the other sites have experienced growth. This suggests that both sites have reached throughput capacity (in respect of container storage rather than trains handled), and that new capacity will need to be provided in the golden triangle; and
- The intermodal terminal at Birch Coppice has experienced almost continual growth since 2008, while regular rail traffic never materialised in its original set-up as a directly rail-served warehouse. Clearly, the market demand intermodal rail freight over conventional box wagon traffic.

Graph 2.1: Rail Traffic to/from Golden Triangle SRFIs 2005-2013



Section 2.3: Rail-served Warehousing Schemes (including SRFIs) Planned for Leicestershire and the East Midlands

2.39 Considering the conclusions of the above analysis, we would therefore expect commercial developers of large scale distribution centres to be seeking the development of rail-served sites in the golden triangle. This is indeed the case, and a total of seven schemes, including a number of SRFIs as defined by the draft NPS, are currently under development or planned for the East Midlands region. It should be noted that one of the schemes is a significant expansion of an existing rail-served logistics facility. Each of the schemes is summarised in the tables below. Reference should be made to the key locational characteristics of a commercially attractive logistics site, which were detailed in Section 5 of the Part A report (including the rationale).

Scheme name	**East Midlands Distribution Centre**
Developer	Clowes Developments
Location	Former power station site at Castle Donington, Leicestershire
Railway connections	The site is located to the south of the freight only line running between Stenson Junction (on the Birmingham to Derby line) and Sheet Stores Junction (which is immediately to the west of Trent Junctions on the Midland Main Line). W10 loading gauge[4] – site is on the route between Birmingham and Doncaster which has recently been enhanced by Network Rail. Site will connect with the 'electric spine' route at Trent Junctions (see below).
Highway connections	2km from A50 Junction 1, then 4km to M1 Junction 24.
Size – hectares and floor space planned	Circa 60ha 230,000 sq metres (2.5 million sq ft) in total planned for site. M&S logistics centre (93,000 sq metres/1 million sq ft) being commissioned shortly (M&S' e-commerce and NDC for slow-moving goods). Circa 120,000 sq metres (1.3 million sq ft) remaining.
Planning status	Consent granted following public inquiry in 2003. Site is currently being built-out
Deliverability	Meets all the key locational characteristics of a commercially attractive logistics site to high level. On that basis and given that the scheme already has planning consent and is currently being built-out, the scheme can be considered as deliverable.

[4] See Part A report Section 5 for description of loading gauge and the various profiles. W10 is the profile required for conveying maritime containers by rail and is therefore an essential requirement for SRFIs.

Scheme name	**East Midlands Gateway**
Developer	Roxhill
Location	Lockington, Leicestershire. Immediately to the north of East Midlands Airport
Railway connections	The site is located to the south of the freight only line running between Stenson Junction (on the Birmingham to Derby line) and Sheet Stores Junction (which is immediately to the west of Trent Junctions on the Midland Main Line). W10 loading gauge – site is on the route between Birmingham and Doncaster which has recently been enhanced by Network Rail. Site will connect with the 'electric spine' route at Trent Junction (see below).
Highway connections	Site is located immediately to the west of and is planned to connect directly with M1 Junction 24.
Size – hectares and floor space planned	Circa 138ha Circa 550,000 sq metres (6 million sq ft).
Planning status	SRFI as defined by the draft NPS. Development Consent Order (DCO) was accepted for examination by the Planning Inspectorate in September 2014.
Deliverability	As noted above, the site has high quality connections to the highway and railway networks. It is well located in relation to its intended key markets i.e. national distribution from the golden triangle. It is sufficiently large and flexible in its configuration so that it can accommodate rail terminal facilities and large warehouses. It is located close to labour (Nottingham, Leicester and Derby) and away from incompatible land uses. Sections 4 & 5 below demonstrate market demand in the East Midlands. The site therefore meets all the key locational characteristics of a commercially attractive logistics site to a high level. There are no other issues in the public domain that would potentially prevent development. On that basis the scheme can be considered as deliverable. Identified as one of the four 'transformational priorities' in the LLEP SEP. Assuming DCO granted, scheme should be operational by 2017.

Scheme name	**East Midlands Intermodal Park**
Developer	Shepherd Developments and Goodman (joint-venture)
Location	Etwall, Derbyshire Immediately to the south west of A50/A38 interchange.
Railway connections	Site is located a short distance to the west of North Stafford Junction on the Birmingham to Derby line (straddles the main line towards Uttoxeter). W10 loading gauge – site is on the route between Birmingham and Doncaster which has recently been enhanced by Network Rail. Site will connect with the 'electric spine' route at Trent Junction (see below).
Highway connections	Site is located immediately to the south west of and is planned to connect directly with the A50/A38 interchange.
Size – hectares and floor space planned	Circa 255ha. Circa 555,000 sq metres (6 million sq ft).
Planning status	SRFI as defined by the draft NPS. Early stages of development. Development Consent Order application likely to be submitted to the Planning Inspectorate in 2015/6.
Deliverability	As noted above, the site has high quality connections to the highway and railway networks. It is well located in relation to its intended key markets i.e. national distribution from the golden triangle. It is sufficiently large and flexible in its configuration so that it can accommodate rail terminal facilities and large warehouses. It is located close to labour (Nottingham and Derby) and away from incompatible land uses. Sections 4 & 5 below demonstrate market demand in the East Midlands. The site therefore meets all the key locational characteristics of a commercially attractive logistics site to a high level. There are no other issues in the public domain that would potentially prevent development. On that basis the scheme can be considered as deliverable. Assuming DCO granted, scheme should be operational 2020.

Scheme name	**Daventry International Rail Freight Terminal Phase III (DIRFT III)**
Developer	ProLogis
Location	Lilbourne, Northants. Site is immediately to the north of the existing DIRFT development, between the A5 (to the west) and M1 (to the east). The proposal is located on the former Rugby Radio Station site.
Railway connections	Site is located alongside the West Coast Main Line (Northampton Loop). W10 Loading gauge.
Highway connections	Site will connect directly with the A5, then 2km to M1 Junction 18.
Size – hectares and floor space planned	Circa 175ha. Circa 700,000 sq metres
Planning status	Circa 38,000 sq me still available on Phase II site. SRFI as defined by the draft NPS. Development Consent Order granted for the scheme in July 2014 (see below also)
Deliverability	As noted above, the site has high quality connections to the highway and railway networks. It is well located in relation to its intended key markets i.e. national distribution from the golden triangle. It is sufficiently large and flexible in its configuration so that it can accommodate rail terminal facilities and large warehouses. It is located close to labour (Northampton, Rugby, Coventry and Leicester) and away from incompatible land uses. Sections 4 & 5 below demonstrate market demand in the East Midlands. The site therefore meets all the key locational characteristics of a commercially attractive logistics site to a high level. There are no other issues in the public domain that would potentially prevent development. On that basis and given that site is an extension of an existing built-out development, the scheme can be considered as deliverable (confirmed by DCO granted). Scheme should be operational by 2016.

Scheme name	**South Northants**
Developer	Ashfield Land
Location	Milton Malsor, Northants
Railway connections	Site is located to the north of the West Coast Main Line (Fast Lines), to the west of the West Coast Main Line (Northampton Loop) and to the east of the A43. W10 Loading gauge.
Highway connections	Site will connect directly with the A43, then 2km to M1 Junction 15a.
Size – hectares and floor space planned	Circa 150ha Circa 600,000 sq metres (6.5 million sq ft)
Planning status	SRFI as defined by the draft NPS. Early stages of development. Development Consent Order application likely to be submitted to the Planning Inspectorate in 2015/6.
Deliverability	As noted above, the site has high quality connections to the highway and railway networks. It is well located in relation to its intended key markets i.e. national distribution from the golden triangle. It is sufficiently large and flexible in its configuration so that it can accommodate rail terminal facilities and large warehouses. It is located close to labour (Northampton, Rugby, Coventry and Leicester) and away from incompatible land uses. Sections 4 & 5 below demonstrate market demand in the East Midlands. The site therefore meets all the key locational characteristics of a commercially attractive logistics site to a high level. There are no other issues in the public domain that would potentially prevent development. On that basis, the scheme can be considered as deliverable. Assuming DCO granted, scheme should be operational 2020-2025.

Scheme name	**Corby Eurohub (aka ProLogis Park Corby)**
Developer	ProLogis
Location	Corby, Northants. Site is located on Stanion Lane Plantation, immediately to the north of Long Croft Road. Development is an extension of the existing Eurohub site (alignments to the existing warehousing were build but sidings never installed).
Railway connections	Site is located on a spur from the Kettering to Corby line, which subsequently connects with the Midland Main Line at Kettering North Junction. W7 loading gauge – albeit that it will connect with the 'electric spine' at Kettering (see below)
Highway connections	Direct connections to the A43, then 12km to the A14
Size – hectares and floor space planned	Circa 58ha. Circa 230,000 sq metres (2.5 million sq ft)
Planning status	Not an SRFI as defined by the draft NPS. The scheme for which planning consent has been granted does not include the installation of rail terminal facilities. However, the site could be served from the adjacent Corby International Rail Freight Terminal (see below).
Deliverability	As noted above, the site has good quality connections to the highway and reasonable connections to the railway network. It is well located in relation to its intended key markets i.e. national distribution from the golden triangle. It is sufficiently large and flexible in its configuration so that it can accommodate large warehouses. It is located close to labour (Corby, Kettering and Northampton) and away from incompatible land uses. Sections 4 & 5 below demonstrate market demand in the East Midlands. The site therefore meets all the key locational characteristics of a commercially attractive logistics site to a reasonable level, although Corby is generally considered a secondary location by the logistics market. There are no other issues in the public domain that would potentially prevent development. On that basis, the scheme can be considered as deliverable. Assuming consent granted, scheme should be operational by 2020.

Scheme name	**Corby International Rail Freight Terminal**
Developer	Roxhill
Location	Corby, Northants. Site is located immediately to the north of Geddington Road. Single warehousing development on the site of the former rail-connected trade car terminal (utilising existing but mothballed rail terminal).
Railway connections	Site is located on a spur from the Kettering to Corby line, which subsequently connects with the Midland Main Line at Kettering North Junction. W7 loading gauge – albeit that it will connect with the 'electric spine' at Kettering (see below)
Highway connections	Direct connections to the A43, then 12km to the A14
Size – hectares and floor space planned	Circa 20ha. Single warehouse: 78,000 sq metres (900,000 sq ft)
Planning status	Not an SRFI as defined by the draft NPS. Planning consent granted for a single warehouse unit on an existing rail-served site
Deliverability	As noted above, the site has high quality connections to the highway and railway networks. It is well located in relation to its intended key markets i.e. national distribution from the golden triangle. It is located close to labour (Corby, Kettering and Northampton) and away from incompatible land uses. Sections 4 & 5 below demonstrate market demand in the East Midlands. The site therefore meets all the key locational characteristics of a commercially attractive logistics site to a reasonable level. There are no other issues in the public domain that would potentially prevent development. On that basis and given that the site has an existing rail connection, the scheme can be considered as deliverable.

2.40 Overall, around 2.9 million square metres of floor space is planned for the above SRFIs and rail-served sites. This equates to around 727ha of land, assuming warehouse occupies 40% of a plot footprint and that consent is granted for those schemes seeking consents. In Leicestershire, the equivalent figure is 169ha, which equates to around 23% of the regional total (noting that currently 27% of the region's strategic floor space capacity is in Leicestershire). Approximately 511ha is located within the broader definition of the 'golden triangle', with the sites in Corby and East Midlands Intermodal Park being marginally to the east and west respectively.

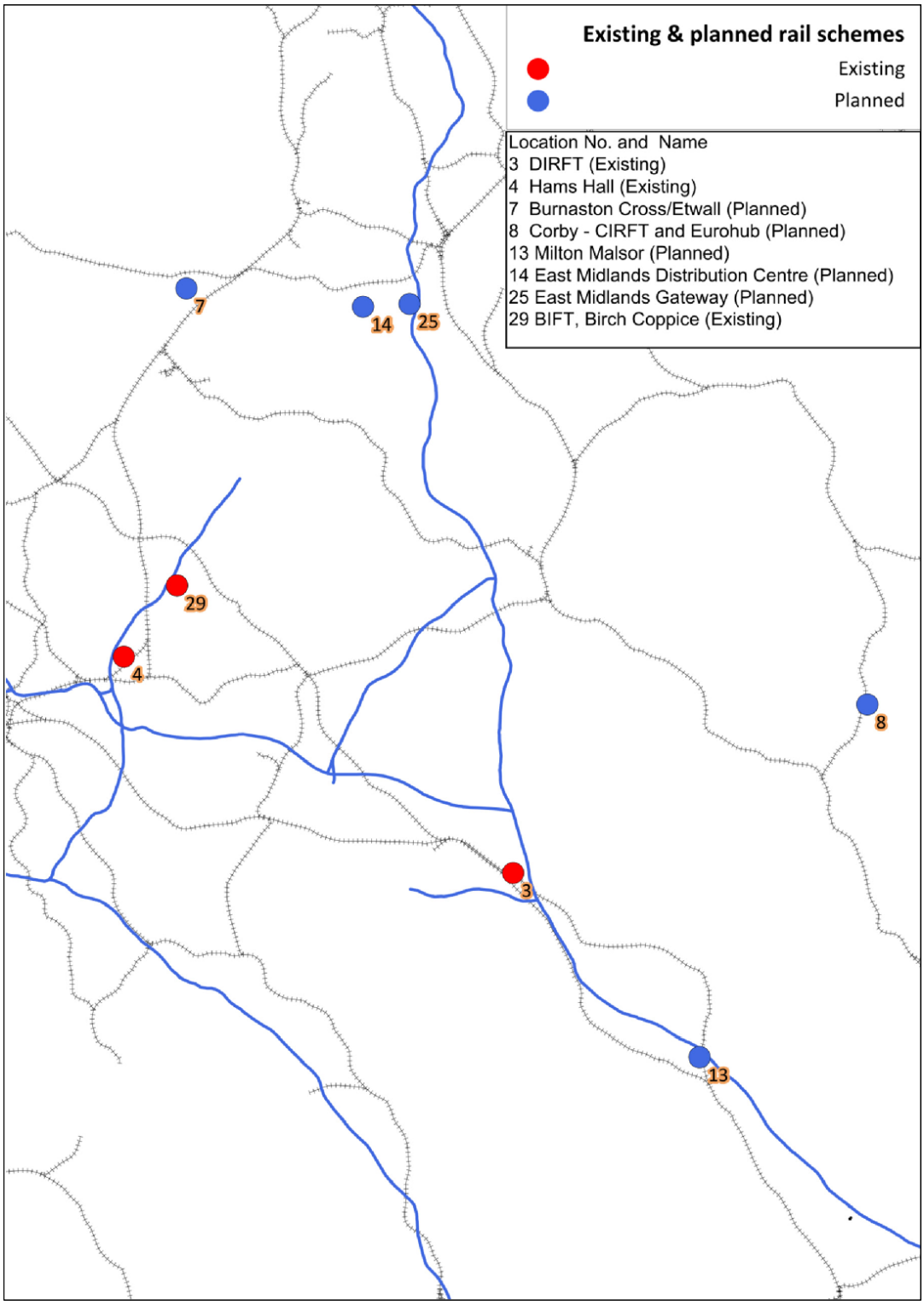
2.41 In the remainder of the golden triangle (the broader definition), a SRFI comprising 400,000 square metres of floor space (100ha) is planned for a site alongside the Bletchley-Bedford railway line to the south-east of Milton Keynes i.e. just over the East Midlands boundary in the East of England region.

2.42 The map below, which is extracted from Map 2.1 in the Part A report (Section 2), shows the location of the above schemes; the blue lines being the motorway network and the grey-dotted lines the national railway system (noting that Map 2.1 from the Part A report illustrates the location of all planned SRFIs/rail-served warehousing schemes nationally).

2.43 In July 2014, the Secretary of State for Transport granted the Development Consent Order (DCO) for DIRFT Phase III (see above). Also in July, the Secretary of State for Communities granted planning consent (following a public inquiry) for a SRFI near Radlett (Hertfordshire), which is located close to the M25 and will be served from the Midland Main Line. The Radlett scheme should provide around 350,000sqm of floor space and a new intermodal terminal. While larger than 60ha, the original application and subsequent appeal pre-dated the provisions of the Planning Act 2008 meaning the application was consequently considered under the existing Town and Country Planning system.

2.44 In both decision letters, the Secretaries of State identified a clear need for the facilities being proposed (large scale warehousing on rail-served sites) and that considerable weight should be attached to the need identified. The national policy documents concerning the development of SRFIs (see Part A) were also cited as being the relevant polices for determining the applications in each case. Further, they also stated that considerable weight should also be attached to the wider benefits of these schemes, including the expected reductions in greenhouse gas emissions. In the case of Radlett, it was determined that the need case and wider benefits out-weighed the identified harm to the greenbelt.

Map 2.1: SRFIs and Rail-Served Warehousing in the Golden Triangle (existing and planned)



Section 2.4: Rail Network Developments

2.45 The Part A report noted the intention to develop a Strategic Rail Freight Network (SFN) to facilitate the continued growth of rail freight services (Section 7.2). The SFN will be a core network of trunk freight routes, capable of accommodating more and longer freight trains, with a selective ability to handle wagons with a greater loading gauge. The major SFN enhancements which have been completed over the past 5-year Control Period (April 2009-March 2014) by Network Rail in the East Midlands are outlined below and illustrated in Map 2.2 following. Map 2.3 further below also illustrates the location in the East Midlands of the main lines and junctions quoted in the text description below.

1. Felixstowe to the West Coast Main Line (WCML) at Nuneaton via Ely, Peterborough and Leicester. Enhancement of the loading gauge to W10[5] along the entire route, thereby allowing the carriage of high-cube maritime containers on standard intermodal wagons. Previously, this route could not convey intermodal traffics, necessitating trains to run via London and the busy southern section of the WCML.

2. Birmingham (Water Orton) to Doncaster via Stenson Junction (on the Birmingham to Derby line), Sheet Stores Junction and the Erewash Valley Line. Enhancement of the loading gauge to W10 along the entire route, thereby allowing the carriage of high-cube maritime containers on standard intermodal wagons. South of Birmingham, the route to Southampton has also been upgraded to W10, thereby creating a gauge cleared route from the south coast port to the East Midlands. At Doncaster, the enhanced routes connect with the East Coast Main Line, itself being upgraded to W10 northwards to Scotland.

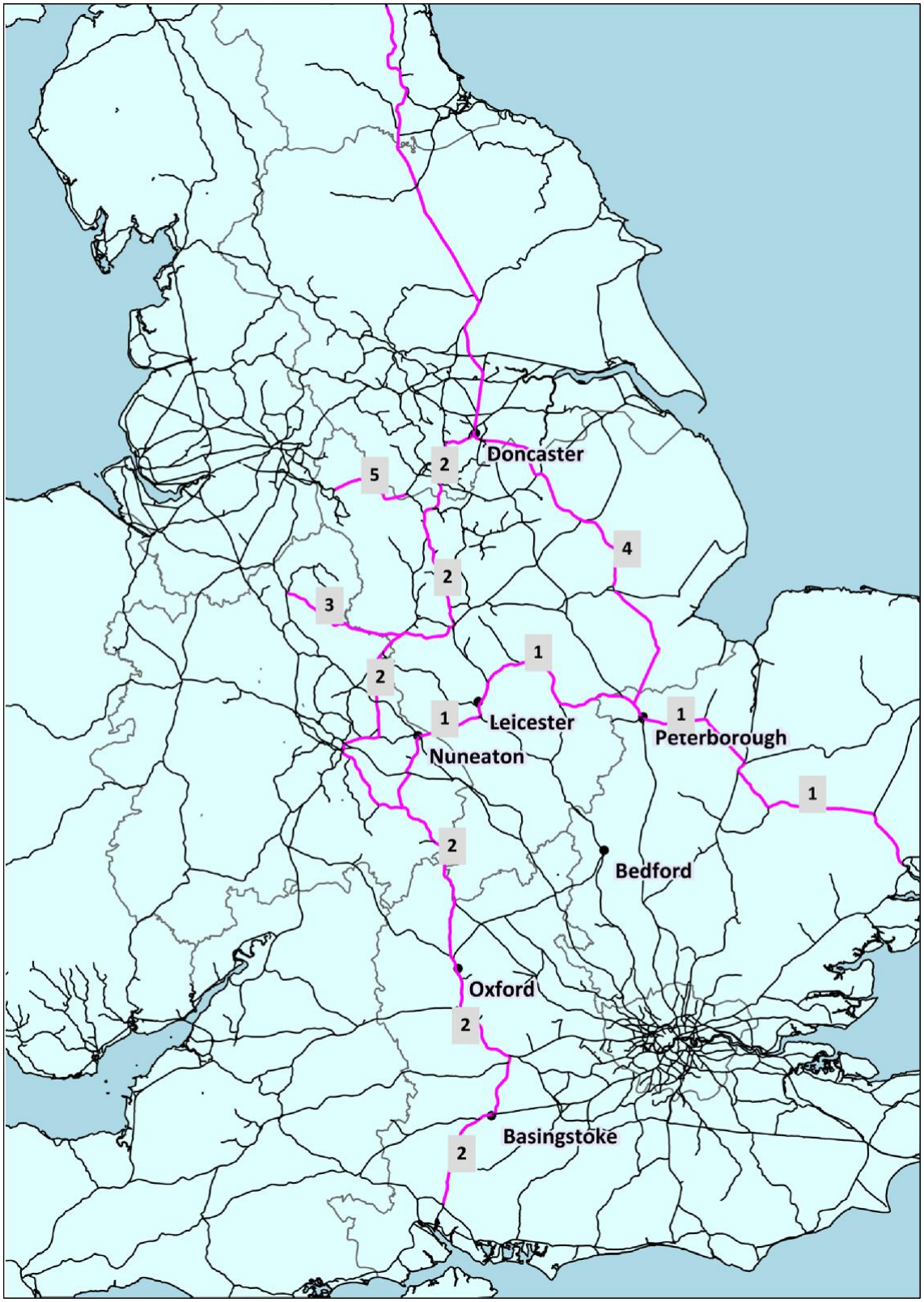
3. Derby to Stoke via Uttoxeter. Enhancement of the loading gauge to W10 along the entire route, thereby allowing the carriage of high-cube maritime containers on standard intermodal wagons. This essentially creates a gauge cleared route to the North West (including the Port of Liverpool) from the East Midlands.

4. Peterborough to Doncaster via Spalding and Lincoln. A loading gauge upgrade to W10 plus other enhancements to allow the route to become the principle freight route from the Haven Ports to Yorkshire/North East, thus avoiding the East Coast Main Line fast lines between Peterborough and Doncaster. Essentially this scheme generates additional freight and passenger capacity between Peterborough and Doncaster by segregating freight/passenger trains.

5. Train lengthening on the Hope Valley line, (mainly for aggregates trains destined for the South East.

[5] See Part A report Section 5 for description of loading gauge profiles. W10 is essentially the profile required for SRFIs

Map 2.2: Major SFN Enhancements CP4 (2009-2014)



Numbers reference paragraphs in text description above

2.46 A number of re-signalling schemes on the Midland Main Line and the Nottingham station hub scheme have also taken place over the past five years. While principally passenger schemes, these have also generated benefits for the freight sector.

2.47 As detailed in the Part A report, the Government published its *High Level Output Statement (HLOS)* and *Statement of Funds Available (SoFA)* in July 2012. Both documents set out, at a strategic level, the capacity and capability enhancements (outputs) for the national railway network the Government wants to be delivered over the following 5-year Control Period (to 2019). Both documents confirmed that the Government will continue to fund the development of the SFN, and has made available a 'ring fenced allocation' of £200 million over the 2014-2019 Control Period 'to fund SFN investments identified by the industry'.

2.48 Network Rail in co-operation with the rail freight industry have since been developing a number of SFN enhancement projects for 2014-2019 Control Period. In Leicestershire (and the East Midlands), SFN projects (i.e. schemes designed specifically to enhance freight capability and capacity) confirmed for funding are outlined below and illustrated in Maps 2.2 following (noting that the precise works required to deliver these schemes is still being considered). Again, Map 2.3 further below also illustrates the location of the main lines and junctions quoted in the text description below.

1. Felixstowe to the WCML at Nuneaton via Ely, Peterborough and Leicester. While the loading gauge has been recently enhanced to W10 (see above), other infrastructure constraints (such as antiquated signalling, at grade junctions and single tracking) have limited the capacity for freight traffic along the route. In the East Midlands, the section of the route from Syston Junction to Wigston Junction via Leicester is a particular capacity constraint. Between Syston and Leicester, essentially one track has to handle freight and CrossCountry passenger trains in both directions, while south of Leicester freight trains then have to cross the northbound line 'at grade' in order to access the route to Nuneaton. While the final scheme has yet to be confirmed, it is likely to involve the installation of additional tracks and grade separation at either Wigston or Syston junctions. When the capacity upgrade is completed, this route is likely to become the main freight route to the West Midlands and North West, thus diverting trains away from London and the busy southern section of the WCML.

2. The electric spine. This project involves the creation of an electrified and W10 gauge cleared route from the Port of Southampton to South Yorkshire via Basingstoke, Oxford, Bedford (via the re-instated Oxford to Bletchley line[6]), Leicester and Derby.

[6] The Oxford to Bletchley line was closed in the 1960s. The East-West Rail Consortium (a group of local authorities) have long since campaigned for its reopening, thereby allowing passenger trains to operate from Oxford to Milton Keynes and Bedford (via the existing Bletchley-Bedford line). Funding for this scheme has also been provided for in the next Control Period to 2019.

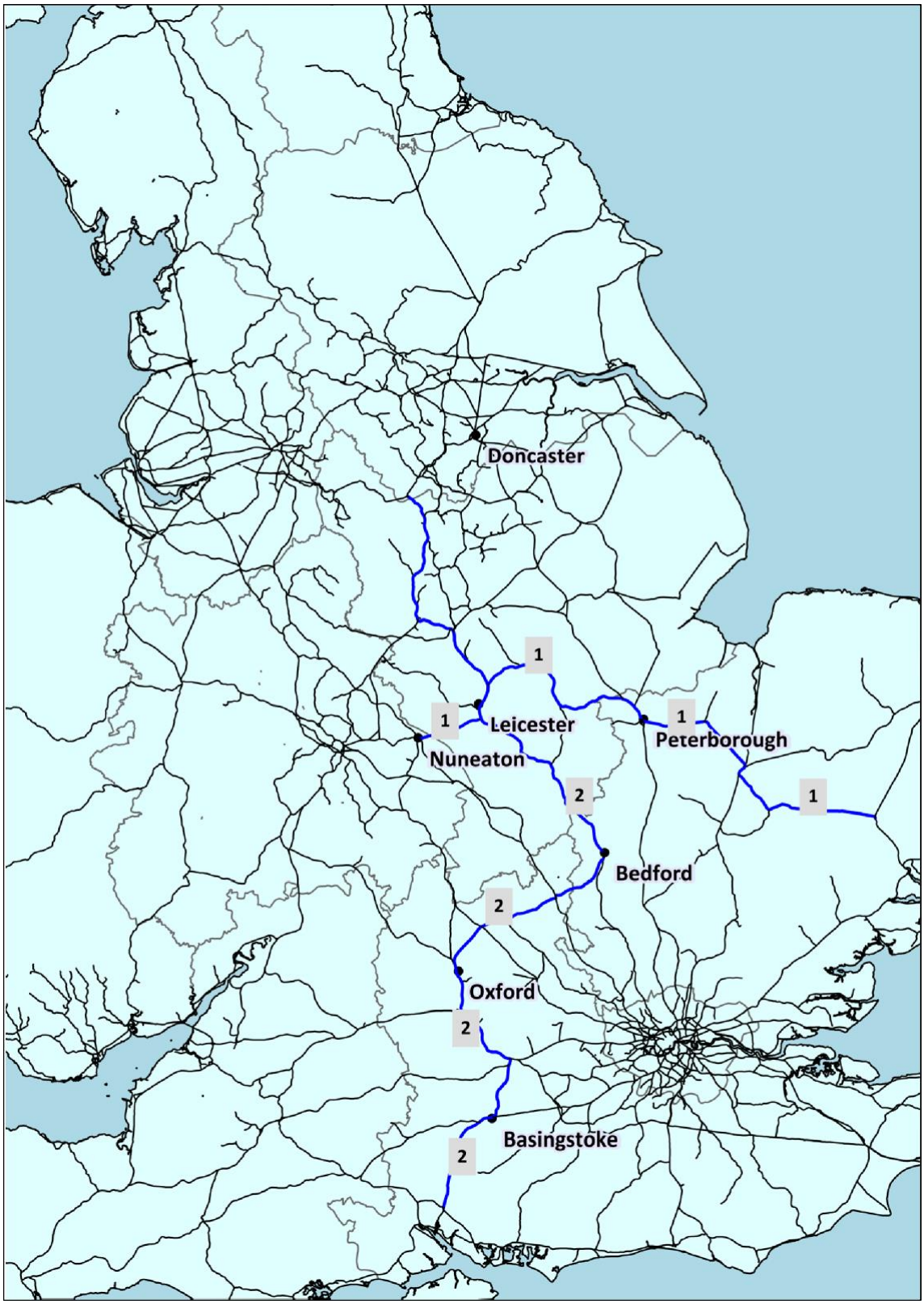
2.49 The route between Southampton and Basingstoke is already electrified (by means of a 'third-rail', albeit that replacement by overhead wires has been mooted), while the route from Reading to Oxford is to be electrified by 2018 as part of Network Rail's Great Western Main Line electrification scheme (using overhead wires). Similarly, Network Rail is also to electrify the Midland Main Line (MML) north of Bedford (also using overhead wires) by 2019 to Sheffield and Nottingham (the line from London to Bedford is already electrified). Two short electrification 'in-fills' (Basingstoke-Reading and Oxford-Bedford) will consequently generate a fully electrified route from Southampton to Yorkshire via Leicestershire (the 'electric spine').

2.50 The installation of overhead electric wires involves clearance work at low over-line bridges. Consequently, route electrification therefore usually delivers W10 loading gauge as a side benefit for the freight sector, this being the loading gauge profile required for the carriage of high-cube maritime containers on standard intermodal wagons. The electric spine scheme will therefore generate a W10 cleared from Southampton to Yorkshire via Leicestershire.

2.51 In addition to the above specific SFN schemes, a number of other enhancement projects are planned for the Midland Main Line during CP5 (2014-2019). These are essentially 'passenger' schemes, albeit there maybe some 'spin-off' benefits for the freight sector (the precise works required to deliver these schemes is still being considered). These are:

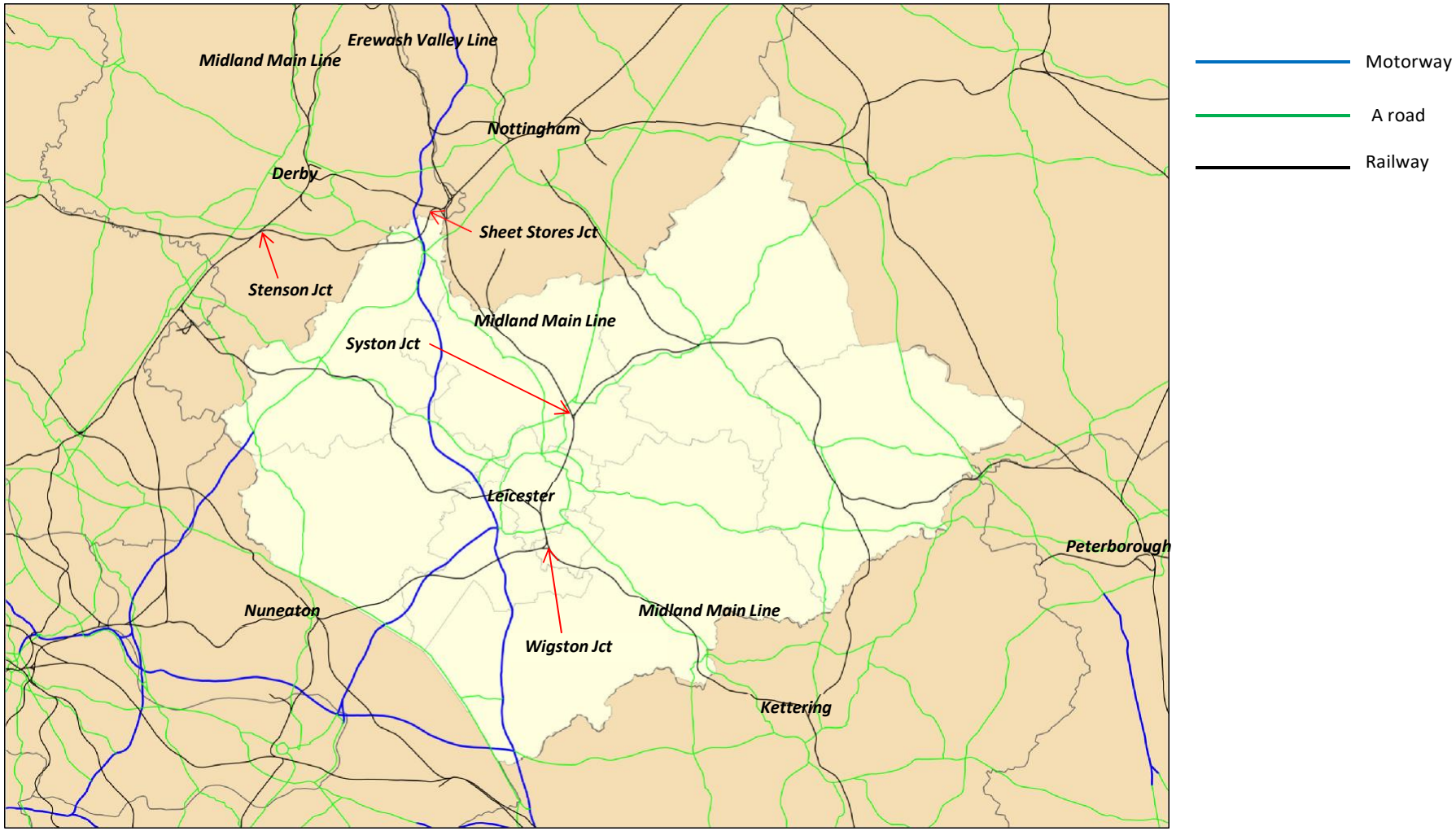
- Midland Main Line electrification (see above – loading gauge enhancement)
- Derby station area re-signalling and re-modelling (improved performance and operational flexibility through the segregation of services through Derby Station);
- Midland Main Line train lengthening; and
- London-Sheffield linespeed improvements.

Map 2.3: SFN Enhancements Proposed 2014-2019



Numbers reference paragraphs in text description above

Map 2.4: Leicestershire and East Midlands Railway Network



2.52 The combination of the recent upgrades along with the proposed projects to be delivered in the current Control Period has significant implications in terms of where rail connected strategic distribution in the East Midlands should be located. As discussed in the Part A report, commercially attractive sites will be those where the adjoining railway lines and the approach routes are gauge cleared to at least W9, and preferably to W10 and W12. From the above, property developers will be seeking to develop SRFIs along the following routes (either directly on or a short distance from):

- The Midland Main Line: Bedford-Market Harborough-Leicester-Trent Junctions-Derby;
- Peterborough-Syston-Leicester-Wigston-Nuneaton;
- Tamworth-Derby (and the freight only line from Stenson Junction to Sheet Stores Junction); and
- Derby-Uttoxeter-Stoke.

2.53 More specifically, commercially attractive sites will be those where the above railway routes pass nearby to junctions the strategic highway network. However, this issue is dealt with in detail in Section 6 below (Key Areas of Opportunity).

Section 2.5: Highway Developments

2.54 In terms of committed and funded developments on the strategic highway network, the *M1 Jct 28-31 'Smart Motorway'* scheme is currently being implemented and due to be completed by Spring 2015. This is a Highways Agency scheme, and when completed will comprise variable speed limits and hard-shoulder running to provide additional capacity and ease congestion at peak times.

2.55 The ideas listed below are in the early stages of exploration by Leicestershire County Council as part of the South West Leicester and Leicestershire Transport Project.

- 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 A426. The intention would be to divert traffic away from the existing Junction 21 (e.g. traffic to/from south Leicester, Oadby, Wigston, Blaby etc which currently has to go via Junction 21), which is at capacity and suffers from network stress at peak times;
- The possibility of a new junction on the M69, between existing junctions 2 and 3, which would potentially give at least a new point of access from the A47 to the M69; and
- The possibility of adding south facing slip roads at M69 Junction 2, which would need to be complemented by a Sapcote southern by-pass. Currently, M69 Junction 2 only has north facing slip-roads, meaning that only southbound vehicles can exit the motorway and

northbound vehicles enter the motorway at this interchange. The additional slips would therefore permit entries and exits in all directions.

2.56 It should be noted that whilst these possible ideas have been discussed with the Highways Agency, their agreement would be necessary to take them forward. None of these ideas are currently committed and funded, and they have no status in planning terms.

Section 2.6: Airfreight at East Midlands Airport

2.57 East Midlands Airport published its Sustainable Development Plan (Land Use) in Spring 2014. Updating the Airport's Master Plan first published in 2006, the document has five main objectives, namely:

- To identify the land, the uses and the facilities required to support the operation of an airport capable of handling 10 million of passengers annually and 1.2 million tonnes of cargo;
- To identify the principal elements of airport infrastructure and the sequencing of development;
- To set out a policy for the use and the development of airport land that is integrated with the Community, Economy and Surface Access and Environment Plans;
- Provide an up-to-date input to the North West Leicestershire Core Strategy; and
- Provide guidance and information to airport users, occupiers, developers, statutory agencies and the local community.

2.58 The Sustainable Development Plan (Land Use) can be downloaded from the airport's website using the following link: http://www.eastmidlandsairport.com/developmentplan/landplan/

2.59 The 2006 Master Plan forecast that airfreight volumes would increase to 723,000 tonnes by 2010 and to reach 1.2 million tonnes by 2016. These forecasts were also in line with those included in the 2003 *Future of Air Transport* White Paper (DfT). In the period since the last Master Plan, cargo growth has been substantially lower than forecast, reaching 267,000 tonnes in 2013. Cargo volumes have been affected by the global recession; albeit in contrast to passenger traffic cargo throughput has not significantly declined and has been generally flat throughout the recession (see Section 8 – Part A report).

2.60 A review of the airport's cargo forecasts was carried out for the Sustainable Development Plan. These forecasts assume that total air freight demand in Great Britain 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*. The airport's forecasts assume that the mail flight network and overall mail volumes will remain relatively unchanged from the current 35,000 tonnes as a result of structural changes to the mail market. This is as a result of the shift from letters to parcels.

2.61 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.

2.62 The DHL building opened in 2000 and it was always intended that the site would be developed in phases. Land continues to be available for further phased development on the western side of the building as and when it may be required. This gives the opportunity for additional parcel handling facilities and associated support services.

2.63 Likewise, land will be reserved within the airport boundary for the development of an integrator hub at Cargo East on land between the Pegasus Business Park and the runway/taxiway. This will enable the development of additional apron to serve the new hub operation. The building will be of a significant scale and will provide for the sortation systems required by the integrated carriers and also landside vehicle access for vans and for HGV's.

Section 2.7: Summary – SWOT Assessment

2.64 The above analysis and the contents of the Part A report effectively comprise an extended 'SWOT assessment' of the strategic distribution sector in Leicestershire and the wider East Midlands region. The table below summarises the main findings and conclusions in the SWOT format.

Strengths 1. Historic competitive advantage in the logistics sector (as evidenced by the analysis in the Part A report). Consequently, an established presence and skill-base in Leicestershire. 2. Central location alongside the strategic highway network (M1, M6, A14). The ability to round-trip a HGV to most cargo origins and destinations within a driver's shift (Part A). 3. Central location alongside the Strategic Rail Freight Network (SFN) – a number of rail routes passing through Leicestershire have recently been upgraded or about to be upgraded. Direct rail connections with all the deep-sea container ports, the Channel Tunnel and key domestic origins and destinations (see above). 4. Well located in relation to key markets – deep-sea ports, Channel Port and other regions. 5. Significant employment in the logistics sector and a major contribution to regional GVA (as evidenced by the analysis in the Part A report).	**Weaknesses** 1. The inability to bring forward the development of commercially attractive sites, a significant proportion of which will need to be directly rail-served, as a means of maintaining and enhancing the Leicestershire's competitive advantage (see above)
Opportunities 1. The development of rail-served large scale strategic distribution sites (SRFIs) as a means of maintaining and enhancing the region's competitive advantage in the logistics sector (see above). 2. The development of road only large scale strategic distribution sites as a means of maintaining and enhancing the region's competitive advantage in the logistics sector (see above). 3. The ability to receive and distribute cargo in a sustainable and competitive manner – albeit dependent on the development of SRFIs. 4. To build on the established range of commercially competitive sites in Leicestershire.	**Threats** 1. The development of B8 sites in areas hitherto not associated with national distribution, particularly the northern Midlands and South Yorkshire. 2. The development of port centric logistics facilities.

3. FREIGHT FLOW FORECASTS TO 2036

3.1 The main aim of this Section of the report is threefold, namely:

- For the period up to 2036, presenting a forecast of freight flows to, from and within in the East Midlands region and Leicestershire sub-region, for both road and rail;
- Assessing how the forecast freight flows over that time period compare with current freight flows; and
- For the period up to 2036, presenting a forecast of goods delivered directly to distribution centres in the East Midlands region and Leicestershire sub-region.

3.2 The outputs from this exercise are important, as they feed into the forecast of land use requirements to 2036 (see Sections 4 and 5 following). The selected forecast years are 2021, 2026, 2031 and 2036.

Section 3.1: Background and Forecasting Methodology

3.3 Network Rail, on behalf of a Freight Market Study Working Group, published a *Freight Market Study* in October 2013. The outputs from the study will inform Network Rail's long term planning process (LTPP)[7]. The Freight Market Study Working Group comprised the following organisations, representing the freight/logistics industry plus key stakeholders:

- Network Rail;
- The Freight Transport Association (FTA);
- The main rail freight operators – Freightliner, DB Schenker, DRS and GBRf;
- Rail Freight Group (RFG);
- Department for Transport, Transport Scotland and the Welsh Government;
- Office of Rail Regulation; and
- Association of Train Operating Companies.

3.4 It is important to note that the FTA and RFG represent a diverse range of shippers who utilise both road haulage and rail freight in their supply chains, along with the main rail freight and road haulage operators. To inform the study, a set of rail freight demand forecasts were produced by MDS Transmodal for the working group. Forecasts for 13 commodity groups were undertaken, including intermodal rail from the ports, Channel Tunnel and domestic sources, which were subsequently combined to form forecasts for all rail freight traffics.

[7] LTPP – a long term route planning and decision making process which will inform where investment in capacity and capability enhancements will be required over the next 30 years.

3.5 The forecasting methodology and assumptions varied for each commodity grouping. As explained in Appendix 1 of the Freight Market Study, *MDS Transmodal's GB Freight Model* was used to produce the intermodal rail traffic forecasts. The baseline assumptions for the forecasts, which were subsequently applied by the GB Freight Model, were initially agreed by the Freight Market Study Working Group following consultation with industry parties. For intermodal traffics, one of the key assumptions adopted was a significant expansion in the amount of strategic logistics floor space which is located on rail-served sites (including SRFIs). Nationally, the forecasts assumed an additional *10 million square metres of rail-served floor space*. All of the East Midlands schemes detailed in Section 2 above (just less than 3 million square metres of floor space) are therefore included in the baseline assumptions. The overall national rail freight forecasts, as presented in the Freight Market Study, are re-produced in the table below.

Table 3.1: National Rail Freight Forecasts

	Millions tonnes lifted (compound annual growth from 2012)			
	2012*	2023	2033	2043
TOTAL	**111.3**	**127.0 (1.1%)**	**161.1 (1.7%)**	**211.7 (2.0%)**
Selected commodity groups				
Ports and Channel Tunnel intermodal	15.7	34.1 (6.7%)	51.8 (5.6%)	72.8 (4.9%)
Domestic intermodal	2.3	16.6 (18%)	35.1 (13.2%)	61.5 (10.9%)

** actual*

Source: Network Rail Freight Market Study 2013

3.6 The road and rail forecasts presented below are consistent with these recent national rail freight demand forecasts. While the Freight Market Study only published the rail freight demand forecasts, due to the *GB Freight Model*'s forecasting technique, it also produces associated road freight forecasts at the same time (essentially it forecasts total freight traffic regardless of mode, with the forecast mode-split then undertaken subsequently by the model). The road freight forecasts presented below are therefore the road outputs associated with the national rail freight demand forecasts.

3.7 When considering the outputs presented below, it is important to note that while the forecasts were published by Network Rail as part of its freight market study (and used to inform its long term route planning), they are not Network Rail's demand forecasts. As explained above (and in the market study document itself), the forecasts were commissioned by the *Freight Market Study Working Group* and undertaken using baseline assumptions the working group themselves agreed following consultation with industry parties. Given the composition of the working group (as outlined above), by implication the assumptions adopted (including the expectation of a significant expansion in the amount of floor space

which is rail-served) and forecasts produced have 'buy-in' from the wider freight industry and key stakeholders, and can therefore be considered the freight/logistics industry's long term demand forecasts. The forecasts were also produced on an unconstrained basis; effectively they assume that there are no capacity constraints or other infrastructure issues which would prevent their delivery.

3.8 Further, as stated in the Part A report, the recently published draft NPS for National Networks also includes these forecasts, noting that it considers them 'robust' and 'that the Government has accepted them for planning purposes'. On this basis, they can also be considered the Government's current long term demand forecasts.

Section 3.2: Road Freight Forecasts for East Midlands and Leicestershire to 2036

3.9 The table below presents road freight forecasts for the East Midlands region and the Leicestershire sub-region for 2021, 2026, 2031 and 2036, along with a comparison of the 2036 forecast year's figures with current freight flows. Appendix 2 presents the forecasts for each year along a comparison with current freight flows. As per the Part A report, the forecasts are only for those commodities which at some point along the supply chain will pass through large scale distribution centres. The adjoining West Midlands region is also included i.e. the two regions which are generally accepted to incorporate the golden triangle.

3.10 It should be noted that for all the tables presented below in this Section, the figures presented are the actual or forecast tonnes-lifted for the years indicated. For example in Table 3.2 below, for Leicestershire in 2012 a total of 18.2 million tonnes were delivered by road freight, which is forecast to grow to 20.6 million tonnes in 2021, 21.9 million tonnes in 2026, 23.2 million tonnes in 2031 and 24.5 million tonnes in 2036. This represents a total growth of 6.3 million tonnes between 2012 and 2036 (i.e. do not sum across rows). Also shown are is the total percentage growth between 2012 and 2036 along with the compound annual growth rate i.e. the year-on-year growth rate assuming a steady rate of growth over the time period considered.

Table 3.2: Road Freight Forecasts for Years 2021, 2026, 2031 and 2036, Distribution Centre Commodities *Source: GB Freight Model.*

	000s tonnes lifted					Growth	% growth	
Cargo Destination	2012	2021	2026	2031	2036	2012-2036	2012-2036	CAGR
East Midlands	74,286	85,920	92,384	98,847	105,129	30,843	42%	1.5%
of which:								
Leicestershire	18,171	20,564	21,894	23,223	24,455	6,284	35%	1.2%
West Midlands	72,432	75,489	77,188	78,886	80,404	7,972	11%	0.4%
Total East and West Midlands	146,718	161,409	169,571	177,733	185,533	38,815	26%	1.0%
Total Great Britain	667,862	722,411	752,717	783,022	804,655	136,793	20%	0.8%
	000s tonnes lifted					Growth	% growth	
Cargo Origin	2012	2021	2026	2031	2036	2012-2036	2012-2036	CAGR
East Midlands	80,066	92,871	99,985	107,099	112,563	32,497	41%	1.4%
of which:								
Leicestershire	21,031	24,260	26,053	27,847	29,201	8,170	39%	1.4%
West Midlands	70,177	73,238	74,939	76,640	77,806	7,629	11%	0.4%
Total East and West Midlands	150,243	166,110	174,924	183,739	190,369	40,126	27%	1.0%
Total Great Britain	667,862	722,411	752,717	783,022	804,655	136,793	20%	0.8%

1. CAGR – compound annual growth rate. The year-on-year growth rate assuming a steady rate of growth over the time period considered.

3.11 Overall, the forecasts suggest that total traffic delivered by road in the East Midlands region will grow by around 31 million tonnes up to 2036 when compared with 2012 levels. This equates to a total growth of 42% or 1.5% annually on a compound growth basis. For Leicestershire, the forecasts suggest that total traffic delivered by road will grow by around 6 million tonnes up to 2036 when compared with 2012 levels. This equates to a total growth of 35% or 1.2% annually on a compound growth basis. This represents a reversal of the 2005-2012 trend as presented in the Part A report (Section 3). The national figure is only for a 20% growth rate over the same period of time or 0.8% annually on a compound basis. The higher growth rates for the East Midlands, when compared with the West Midlands and national figure, reflects the significant development of the SRFIs in the region, as outlined in sub-section 2.3 above.

Section 3.3: Rail Freight Forecasts for East Midlands and Leicestershire to 2036

3.12 The table below presents rail freight forecasts for 2021, 2026, 2031 and 2036, along with a comparison of the 2036 forecast year's figures with current freight flows. Appendix 2 presents the forecasts for each year along a comparison with current freight flows. As per the Part A report, the forecasts are only for intermodal rail freight traffics only i.e. deep-sea maritime containers and other unit loads, where the cargo conveyed will be passing through a distribution centre at some stage in the supply chain. The adjoining West Midlands region is also included.

Table 3.3: Rail Freight Forecasts for 2026, 2031 and 2036, Intermodal Traffics by Origin and Destination *Source: GB Freight Model*

	000s tonnes lifted					Growth	% growth	
Cargo Destination	2012	2021	2026	2031	2036	2012-2036	2012-2036	CAGR
East Midlands	1,097	5,069	7,276	9,483	13,020	11,923	1087%	10.9%
of which:								
Leicestershire	-	528	822	1,115	1,652	0		
West Midlands	2,491	5,491	7,158	8,825	10,835	8,344	335%	6.3%
Total East and West Midlands	3,588	10,561	14,434	18,308	23,855	20,267	565%	8.2%
Total Great Britain	18,233	46,902	62,830	78,757	99,935	81,702	448%	7.3%
	000s tonnes lifted					Growth	% growth	
Cargo Origin	2012	2021	2026	2031	2036	2012-2036	2012-2036	CAGR
East Midlands	1,214	4,934	7,001	9,068	12,900	11,686	963%	10.3%
of which:								
Leicestershire	-	370	576	782	1,207	0		
West Midlands	2,412	5,078	6,560	8,041	10,074	7,662	318%	6.1%
Total East and West Midlands	3,626	10,013	13,561	17,109	22,974	19,348	534%	8.0%
Total Great Britain	18,233	46,902	62,830	78,757	99,935	81,702	448%	7.3%

3.13 Overall, the forecasts suggest that total intermodal rail freight traffic delivered in the East Midlands region will grow by around 12 million tonnes up to 2036 when compared with 2012 levels. This equates to a total growth of nearly 11% annually on a compound growth basis. For Leicestershire, the forecasts suggest that total traffic delivered will grow from zero in 2012 to around 1.7 million tonnes up to 2036. The national figure is for a 448% growth rate over the same period of time or 7.3% annually on a compound basis. Again, the higher growth rates for the East Midlands reflects the significant development of the SRFIs in the region, as outlined in Section 2 above.

3.14 The table below presents rail freight forecasts to 2036 by traffic type. The major growth is forecast to be in traffics to/from the deep-sea container ports and domestic traffics. Domestic traffics mainly comprises cargo moving from NDCs in the Midlands to rail-served RDCs and end-users in more remote regions e.g. Scotland, along with backload traffic from those same regions to the Midlands based NDCs.

Table 3.4: Rail Freight Forecasts to 2036, Intermodal Traffics by Type

	000s tonnes lifted	
Destination Region and Type	2012	2036
East Midlands:	**1,097**	**13,020**
of which:		
Channel Tunnel	68	340
Import from Port	271	6,538
Domestic	757	6,143
West Midlands:	2,491	10,835
of which:		
Channel Tunnel	96	209
Import from Port	2,343	6,807
Domestic	52	3,819
Total East and West Midlands	*3,588*	*23,855*
of which:		
Channel Tunnel	*164*	*549*
Import from Port	*2,614*	*13,345*
Domestic	*809*	*9,962*

Table 3.4 continued

Origin and Type	000s tonnes lifted 2012	2036
East Midlands:	**1,214**	**12,900**
of which:		
Channel Tunnel	64	201
Export to Port	211	2,932
Domestic	939	9,768
West Midlands:	2,412	10,074
of which:		
Channel Tunnel	49	106
Export to Port	2,323	6,070
Domestic	40	3,897
Total East and West Midlands	*3,626*	*22,974*
of which:		
Channel Tunnel	*113*	*307*
Export to Port	*2,534*	*9,002*
Domestic	*979*	*13,665*

Source: GB Freight Model

Section 3.4: Total Freight Flow Forecasts to 2036

3.15 The table below presents therefore presents the total freight forecasts for 2021, 2026, 2031 and 2036 for the East Midlands region and the Leicestershire sub-region. Again, Appendix 2 presents the forecasts for each year along a comparison with current freight flows. Overall, the forecasts suggest that total traffic delivered in the East Midlands region will grow by around 43 million tonnes up to 2036 when compared with 2012 levels. This equates to a total growth of 57% or 1.9% annually on a compound growth basis. For Leicestershire, the forecasts suggest that total traffic delivered will grow by around 8 million tonnes up to 2036 when compared with 2012 levels. This equates to a total growth of 44% or 1.5% annually on a compound growth basis.

Table 3.5: Total Forecast Freight Flows to 2036

	000s tonnes lifted						Growth	% growth	
Cargo Destination	2012	2021	2026	2031	2036		2012-2036	2012-2036	CAGR
East Midlands	75,383	90,989	99,660	108,330	118,149		42,766	57%	1.9%
of which:									
Leicestershire	18,171	21,092	22,715	24,338	26,107		7,936	44%	1.5%
West Midlands	74,923	80,980	84,346	87,711	91,239		16,316	22%	0.8%
Total East and West Midlands	150,306	171,970	184,005	196,041	209,388		59,082	39%	1.4%
	000s tonnes lifted						Growth	% growth	
Cargo Origin	2012	2021	2026	2031	2036		2012-2036	2012-2036	CAGR
East Midlands	81,280	97,805	106,986	116,167	125,463		44,183	54%	1.8%
of which:									
Leicestershire	21,031	24,630	26,630	28,629	30,408		9,377	45%	1.5%
West Midlands	72,589	78,317	81,499	84,681	87,880		15,291	21%	0.8%
Total East and West Midlands	153,869	176,122	188,485	200,848	213,343		59,474	39%	1.4%

Source: GB Freight Model

3.16 The above forecasts, however, do not establish the likely future volume of goods which can be expected to be delivered directly to distribution centres in the East Midlands and Leicestershire sub-region. As per the existing traffics analysis in the Part A report, they reflect goods being lifted along the supply chain i.e. manufacturer/port to distribution centres to retail outlets. The analysis in Part A subsequently concluded that around 45% of current road freight traffic destined for the East Midlands was being delivered direct to a distribution centre (with the remainder being delivered direct to stores or to other facilities), and also assuming that 100% of rail freight is delivered direct to a distribution centre (given the nature of this traffic, it is reasonable to assume that 100% of these flows will be direct to a distribution centre).

3.17 It is reasonable to assume that the proportion of goods being delivered directly to large scale warehouses in the East Midlands region up to 2036 will be the same as the 2012 percentage. On this basis, the volume of unitised goods likely to be delivered directly to large scale warehouses in 2026 can be calculated. This is shown in the tables below, while the equivalent figures for 2026 and 2031 are presented in Appendix 3.

Table 3.6: Forecast Traffic 2036 Destined for East Midlands Distribution Centres

	000s tonnes lifted		
East Midlands	Total	To distribution centre	% to distribution centre
Road	105,129	47,308	45%
Rail	13,021	13,021	100%
Total	118,150	60,329	51%

	000s tonnes lifted		
Leicestershire	Total	To distribution centre	% to distribution centre
Road	24,455	11,005	45%
Rail	1,652	1,652	100%
Total	26,107	12,657	48%

4. FORECAST OF LAND USE REQUIREMENTS TO 2036

4.1 Given the need to maintain and enhance Leicestershire's competitive position through the continued development of new commercially attractive strategic sites (Section 2), a forecast of future demand for new-build large scale warehousing in the East Midlands region and Leicestershire sub-region has been undertaken. The output from this exercise is an estimate of the *total gross warehouse new-build* which can be expected up to 2036. Planners often consider the 'net change' in floor space, but for warehousing the gross new-build rate is the more important figure as, in many cases, new capacity will need to be accommodated at new sites. For example, most existing sites are not rail-served and many will not have the requisite plot size/configuration for the very large scale units now required by the market (see Sections 4 and 5 from Part A report). From the new-build figure, the amount of 'new' land required can consequently be estimated.

4.2 The traditional approach to employment land forecasting is to relate employment levels to floor space. More specifically, future growth in employment is related to future demand for floor space/land. While this provides a suitable forecasting method for many land-use types (e.g. B1), applying the same approach to the logistics sector is unreliable and ultimately produces inaccurate results, for three main reasons:

- The correlation between employment density and floor space in the logistics warehousing sector is weak. Facilities of broadly the same floor space can have widely varying employment densities, as employment levels are generally related to cargo type and site activity. For example, RDCs handling food produce are very labour intensive whereas NDCs storing white goods will have a fairly low employment density. Also, in some parts of the logistics sector employment levels are highly seasonal in nature;
- Demand for floor space is related to cargo volume and throughput; and
- It takes no account of the fact that there is a continual need to replace old warehouse stock which becomes 'life expired'.

4.3 Given this position, a different approach to forecasting future warehouse new-build is required. This needs to take into account the fact that new-build warehousing is a combination of two factors, namely:

- The requirement to continually replace existing warehouse capacity which is 'life expired' (replacement build); and
- The need for additional floor space to handle long-term growth in traffic volumes (growth build).

4.4 Most newly built floor space is a 'like-for-like' 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 (many developers will depreciate their warehouse stock over a 25-30 year economic life), 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 most 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.

4.5 This process consequently requires new sites to be brought forward (or new plots at existing sites), thereby allowing occupiers to re-locate to new buildings and releasing the existing facility for refurbishment or plot recycling. It should also be noted that this process also permits 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.

4.6 Secondly, 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 basis that the old warehouses are demolished. 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.

4.7 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. This trend also has further implications for warehouse demand. Domestically manufactured goods would normally have been stored at the factory site prior to despatch to the retailers' distribution networks. However, imported goods still require facilities in which they can be stored before they are required by the retailers. Given that there are significant costs associated with the storage of maritime containers on the quay at deep-sea ports (shipping lines are normally permitted a short period of free demurrage, after which the port charges for storage), this implies a growing need for additional warehousing floor space simply to store imported goods which are seasonal in nature and/or have long lead times (i.e. need for 'buffer storage'). As a result, a proportion of newly built floor space is simply to 'stand still' (i.e. will be built anyway regardless of traffic growth).

4.8 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.

4.9 Considering the above, 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. This is because the replacement capacity, along with the growth build element, would subsequently migrate to other regions given a lack of sites in the golden triangle. This clearly has Gross Value Added and employment implications, which are addressed in Section 7 below.

4.10 On this basis, the forecasting methodology accounts for the replacement build and growth build elements separately in the first instance. The two elements are then added together to produce an estimate of total gross warehouse new-build. In affect, the forecasts have been 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 redundant building i.e. they do not re-locate to the competing regions or ports discussed in sub-section 2.1. Unless otherwise specified, the analysis below considers gross new-build along with the amount of land required to accommodate that gross new-build, and not the 'net change' in the region's/sub-region's floor space. In line with the freight flow analysis in Section 3, the forecast years are 2021, 2026, 2031 and 2036.

Section 4.1: Replacement Build

4.11 In order to estimate the 'replacement build' element (i.e. floor space which will become functionally obsolete or in some cases physically obsolete), the existing stock of large scale warehousing[8] in the East Midlands region needs to be considered. This was undertaken in Section 4 of the Part A report, and showed that the East Midlands region currently hosts just over 8 million square metres of floor space across 334 large scale warehouse units. In Leicestershire itself, around 2.25 million square metres of floor space across 89 warehouse units were identified.

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

4.12 On the basis that the useful life of a modern warehouse building is 30 years, over the next 22 years up to 2036 we could therefore expect around 73% of the existing warehouse stock in the region to require replacement (i.e. 22 years/30 years = 73%). This means that up to 2036 we can expect around 5.9 million square metres of new warehouse floor space to be built in the East Midlands region simply to replace existing stock i.e. the 'replacement build' element. Out of this regional total, around 1.6 million square metres of the existing capacity in Leicestershire can expect to be replaced up to 2036. This is shown in the table below for 2036, alongside the equivalent figures for forecast years 2021, 2026 and 2031, and is considered the 'high' replacement scenario. The 'land required' (in hectares) at this stage simply reflects the quantum of land needed to accommodate the floor space, and they are based on the widely recognised figure that a warehouse occupies 40% of a plot footprint. It is not a forecast of the 'new land' that will need to be brought forward up to 2036; this is addressed in Section 5 following.

Table 4.1: Existing Large Scale Warehouse Floor Space and Gross Replacement New-Build to 2036 – 30 year life (high scenario)

	000s sq m			
	East Midlands		Leicestershire	
	2013	2021	2013	2021
Existing floor space	8,056		2,250	
Replacement build		2,417		675
Land required (ha)		604		169

Assumes:
30% of stock replaced between 2013 and 2021
Land required - floor space is 40% of plot footprint

	000s sq m			
	East Midlands		Leicestershire	
	2013	2026	2013	2026
Existing floor space	8,056		2,250	
Replacement build		3,222		900
Land required (ha)		806		225

Assumes:
40% of stock replaced between 2013 and 2026
Land required - floor space is 40% of plot footprint

	000s sq m			
	East Midlands		Leicestershire	
	2013	2031	2013	2031
Existing floor space	8,056		2,250	
Replacement build		4,511		1,260
Land required (ha)		1,128		315

Assumes:

56% of stock replaced between 2013 and 2031

Land required - floor space is 40% of plot footprint

	000s sq m			
	East Midlands		of which, Leicestershire	
	2013	2036	2013	2036
Existing floor space	8,056		2,250	
Replacement build		5,881		1,643
Land required (ha)		1,470		411

Assumes:

73% of existing stock replaced up to 2036

Land required - floor space is 40% of plot footprint

4.13 Alternatively, we have also considered a scenario where the rate of replacement begins to slow compared with historical trends. This may extend the useful life to around 40 years. This suggests that around 50% of the existing stock will require replacement up to 2036. This low 'replacement' scenario is shown in the table below for 2036, alongside the equivalent figures for 2021, 2026 and 2031.

Table 4.2: Existing Large Scale Warehouse Floor Space and Gross Replacement New-Build to 2036 – 40 year life (Low Replacement Scenario)

	000s sq m			
	East Midlands		Leicestershire	
	2013	2021	2013	2021
Existing floor space	8,056		2,250	
Replacement build		1,813		506
Land required (ha)		453		127

Assumes:

22.5% of stock replaced between 2013 and 2021

Land required - floor space is 40% of plot footprint

	000s sq m			
	East Midlands		Leicestershire	
	2013	2026	2013	2026
Existing floor space	8,056		2,250	
Replacement build		2,417		675
Land required (ha)		604		169

Assumes:

30% of stock replaced between 2013 and 2026

Land required - floor space is 40% of plot footprint

	000s sq m			
	East Midlands		Leicestershire	
	2013	2031	2013	2031
Existing floor space	8,056		2,250	
Replacement build		3,384		945
Land required (ha)		846		236

Assumes:

42% of stock replaced between 2013 and 2026

Land required - floor space is 40% of plot footprint

	000s sq m			
	East Midlands		of which: Leicestershire	
	2013	2036	2013	2036
Existing floor space	8,056		2,250	
Replacement build		4,028		1,125
Land required (ha)		1,007		281

Assumes:

50% of existing stock replaced between 2013 and 2036

Land required - floor space is 40% of plot footprint

Section4.2: Growth Build

4.14 In order to estimate the growth build element (i.e. additional floor space to handle long-term growth in traffic volumes), two factors need to be considered, namely:

- The current (2012) volume of cargo which is delivered directly to large scale distribution centres in the East Midlands region and Leicester sub-region; and

- For the years 2021, 2026, 2031 and 2036, the volume of cargo forecast to be delivered directly to large scale distribution centres in the East Midlands region and Leicester sub-region.

4.15 The current volume of cargo delivered direct to distribution centres in the East Midlands was estimated to be around 34.6 million tonnes in 2012. (see Section 3 of Part A report). The forecast volume of cargo delivered direct to large scale distribution centres for the forecast years 2021, 2026, 2031 and 2036 is presented in Appendix 3 (based on the analysis from Section 3 above). The forecast volume of cargo for delivery direct to large scale distribution centres in the East Midlands region in 2036 is estimated to be around 60 million tonnes, a growth of around 26 million tonnes over 2012 levels. As noted above in Section 3, these forecasts are consistent with the recently produced (and industry agreed) national rail freight demand forecasts, which the Government has subsequently accepted for planning purposes (draft NPS).

4.16 The growth in annual traffic (compared with 2012 levels) for each of the forecast years has subsequently been converted into the need for additional floor space i.e. the growth build element, using generally accepted 'conversion factors' which relates annual tonnage throughput and floor space at large scale 'high bay' type warehouses. These are also presented in Appendix 3.

Section 4.3: Total New-build and Land Requirements

4.17 By combining the ‘replacement build’ and ‘growth build’ elements, the total gross warehouse new-build which can be expected by 2036 can be calculated. This is shown in the tables below together with the associated land requirements for the high and low replacement scenarios.

4.18 It should be noted that for all the forecasts presented in the tables below (and in Section 5), the gross new-build figures (in square metres) and the associated land required (in hectares) represent a progression from the current day to the year indicated i.e. it is not a cumulative total and also do not sum across the rows. For example, referring to the table below for Leicestershire a total of 762,000 sqm is forecast to be built from the current day up to 2021 and 1,036,000 sqm is forecast to be built from the current day up to 2026 etc.. (in other words 274,000 sqm is built between 2021 and 2026). It is not 762,000 sqm built up to 2021 and then a further 1,036,000 sqm built between 2021 and 2026 etc...

Table: 4.3: Total Gross New-Build Floor Space and Associated Land Requirements to 2036 (high replacement scenario)

	000s sq m			
Year	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

Table: 4.4: Total Gross New-Build Floor Space and Associated Land Requirements to 2036 (low replacement scenario)

	000s sq m			
Year	2021	2026	2031	2036
Leicestershire				
Replacement build	506	675	945	1,125
Growth Build	87	136	185	244
Total	**594**	**811**	**1,130**	**1,369**
Land required (ha)	**148**	**203**	**282**	**342**
	000s sq m			
	2021	2026	2031	2036
East Midlands				
Replacement build	1,813	2,417	3,384	4,028
Growth Build	501	779	1,059	1,405
Total	**2,314**	**3,196**	**4,442**	**5,433**
Land required (ha)	**579**	**799**	**1,111**	**1,358**

Land required - floor space is 40% of plot footprint

4.19 The above analysis therefore estimates that the total gross warehouse new-build which can be expected up to 2036 across the East Midlands region is in the order of 7.3 million square metres for the high replacement scenario. On the basis of a lower replacement build element, the total gross warehouse new-build which can be expected up to 2036 is around 5.4 million square metres. For Leicestershire, the total gross warehouse new-build which can be expected up to 2036 is in the order of 1.9 million square metres for the high replacement scenario and 1.4 million square metres for the lower replacement scenario.

4.20 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 between 1,358ha (low) and 1,822ha (high), given that the warehouse itself normally occupies around 40% of the total plot footprint. On the same basis, between 342ha (low) and 472ha (high) would need to be brought forward by 2036 in Leicestershire. This, however, will not be the case and the issue of demand versus existing site supply is addressed in Section 5 below. However, to put the demand analysis into context, the 7.3 million square metres expected for the high scenario equates to a mean build rate of around 317,000 sq metres per annum. As discussed in the Part A report, take-up in the East Midlands region in 2013 was just less than 500,000 square metres.

4.21 While 'high' and 'low' land use forecasts have been considered above, 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. Traditionally, the principal function of many NDCs in the Midlands was to hold stock before its transfer to RDCs or direct to retail stores. Both inbound and outbound cargo flows were therefore at the 'pallet level'. However, the growth of e-commerce (and in particular the growth of direct home deliveries) means that an increasing proportion of outbound flows from NDCs are at the individual consignment level (in an envelope or small box/package which is subsequently collected by Royal Mail or parcel couriers). This requires different picking, handling and packaging solutions compared with 'pallet level' operations, which are generally based around fork-lift truck type equipment moving palletised goods to/from pallet racks. 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. Consequently, combining e-commerce and the traditional NDC function under the one roof will often require a new building rather than the adaption of an existing facility (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).

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. As will be discussed below, 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. Section 3 of the Part A report demonstrated strong growth rates in intermodal rail freight up to 2012, both nationally and in Leicestershire and the wider East Midlands region. The freight flow forecasts in Section 3 showed expected continuing strong growth rates in this sector. This is being driven by an increasing desire for some occupiers, as evidenced by the analysis throughout this document and the Part A report, to re-locate their existing operations to rail-served sites in order to achieve the financial benefits associated with rail freight. For example, Sainsbury's have recently opted to build a new NDC at DIRFT, taking advantage of the site's rail terminal, much of which will essentially be a like-for-like replacement of existing floor space capacity currently at non rail-served sites.

4.22 Consequently, we should expect the 'replacement build' element to be at the faster rate indicated above i.e. the high replacement scenario. 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/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 (i.e. sites at the right locations – good motorway links, well located relative to markets, large plots, 24/7 operation etc..). This will be achieved by delivering a supply of B8 sites at the higher end of the land use forecasts detailed above. Conversely, a restricted spatial spread at less advantageous locations, implied by the lower end of the land use forecasts, will have the opposite effect.

5. EXISTING AND FUTURE SITE SUPPLY – IDENTIFYING THE GAPS

5.1 The main aim of this section of the report is threefold, namely:

- To consider the likely demand to 2036 at rail-served sites in Leicestershire and the East Midlands region, along with the quantum of land proposed for the various SRFIs and other rail-served warehousing schemes in the region;
- To consider the likely demand to 2036 at road only connected sites in Leicestershire and the East Midlands region, along with the quality and quantum of land currently available at suitable existing sites which have vacant plots; and
- Assess whether there is likely to be short-fall of suitable sites up to 2036 i.e. demand to 2036 being greater than existing site supply and currently being brought forward.

5.2 The land use forecasts in Section 4 suggest that between 1,358ha and 1,822ha would need to be brought forward across the East Midlands region by 2036, on the basis that all of the future demand will require plots at new sites (noting that the high scenario is the preferred option). For Leicestershire, the figures are between 342ha (low) and 472ha (high).

5.3 However, expecting all new-build warehousing to locate at new sites is unrealistic from both a planning and logistics market perspective. Consequently, these forecast figures are a 'gross requirement', and it does not represent the total amount of additional land which will need to be brought forward through Local Plans as it has not taken into account the following:

- The proposals for a number of Strategic Rail Freight Interchanges (SRFIs), which are coming forward for examination through the Development Consent Order (DCO) process;
- The amount of land currently available at suitable existing sites which have vacant plots and already have consents for B8 development;
- The amount of land at suitable sites 'in the planning pipeline' (rail and non rail-linked) which could also accommodate new-build warehousing; and
- The amount of land at existing suitable sites where the in-situ buildings could feasibly be refurbished or the plot recycled for new-build warehousing following decommissioning of the present buildings.

5.4 However, it is also important to understand 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. Essentially the size and configuration of existing sites will often be unsuitable for the type of modern buildings demanded by the market (see Part A report). Also, when the other commercially attractive sites criteria are considered (see Part A), it may 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. As noted above, in planning terms this situation can often presents opportunities to 'release' land for other uses, such as housing; and

- The NPPF 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. Further, the logistics market itself, particularly operators of large distribution centres, are demanding facilities located alongside rail terminals[9]. 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 and that Eurohub in Corby was designed to be rail-served but the connections were never installed).

5.5 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. Existing B8 sites, sites in the planning 'pipeline' and recycled land could potentially accommodate the remainder of the expected new-build which will not demand a rail-served location or require a very large plot. The next stage of the analysis, therefore, has considered the quantity and quality of current land supply in the region and Leicestershire sub-region along with the emerging SRFIs currently at various stages in the DCO process. From this analysis, it will be possible to identify and quantify the amount of additional land at strategic sites which will need to come forward up to 2036.

Section 5.1: Rail-Served Sites (Including SRFIs) – Demand and Supply

5.6 We have considered the proportion of the forecast gross new-build likely to demand a plot at a rail-served site, along with the quantum of land which will potentially be brought forward at rail-linked sites up to 2036 (though again noting that even at a rail-served site, road haulage will remain the dominant mode of transport for both inbound and outbound cargo flows). This includes land currently available at existing rail-served sites with B8 consents and the various SRFIs proposed for the region and currently being considered by the planning/DCO process (includes the expansion of existing SRFIs and new schemes).

5.7 At present, the only major development of rail-served warehousing in the East Midlands region is at DIRFT (Phases I and II). Currently, the site accommodates around 520,000 square metres of floor space, equating to *around 6.5%* of the regional total floor space capacity. There is currently no rail-served floor space in Leicestershire, albeit the East Midlands Distribution Centre scheme is about to be commissioned. If a continuation of this existing

[9] In line with market demand (see Part A) and the description of SRFIs in the NPS, as a minimum requirement a rail-linked or rail-served strategic site is considered to be one with an intermodal terminal capable of serving on-site warehousing without use of the public road network. Sites may also have rail sidings directly alongside some or all of the warehousing units.

proportion is assumed going forward, the amount of rail-served land that would need to be brought forward up to 2036 is shown in the table below.

Table 5.1: Gross New-Build Floor Space and Land Required at Rail-served Sites to 2036 – Continuation of Existing Proportion of Floor Space at Rail-served sites[10]

	Gross New-build (000s sq m)				Land Required (ha)			
Year	2021	2026	2031	2036	2021	2026	2031	2036
Leicestershire								
Total - high	762	1,036	1,445	1,886	191	259	361	472
Total - low	594	811	1,130	1,369	148	203	282	342
Rail served - high	50	67	94	123	12	17	23	31
Rail served - low	39	53	73	89	10	13	18	22
East Midlands								
Total - high	2,918	4,001	5,570	7,286	730	1,000	1,393	1,822
Total - low	2,314	3,196	4,442	5,433	579	799	1,111	1,358
Rail served - high	190	260	362	474	47	65	91	118
Rail served - low	150	208	289	353	38	52	72	88

Land required - floor space is 40% of plot footprint
Total gross new-build as per Tables 4.3 and 4.4

5.8 However, we should expect a much greater proportion of the future new-build to locate at rail-served sites across the region. As alluded to previously, evidence for this approach is provided from a number of sources.

1. National planning policy alongside the mode-shift and sustainability policies being pursued by Government. These were reviewed in the Part A report (Section 7), and in summary they identify a clear need for new SRFI capacity to be developed and encourage new large freight generating schemes to be developed at rail/water served sites (NPPF, draft NPS etc..). Recent planning consent decision letters (DIRFT III and Radlett SRFI) state that considerable weight should be attached to this need identified. Mode shift will only be generated, and the wider sustainability and greenhouse gas benefits achieved, when logistics floor space is directly rail-served (as this provides the commercial incentive for shippers to use rail-freight).

2. The large growth rates over the past decade in the use of rail, particularly on flows from the deep-sea ports to the English Midlands and north of England (as described in Section 3 of the Part A report).

[10] Noting again that for all the forecasts presented in this Section, the gross new-build figures (in square metres) and the associated land required (in hectares) represent a progression from the current day to the year indicated i.e. it is not a cumulative total and also do not sum across the rows.

3. The ability to access reliable and cost competitive rail freight services is becoming a key commercial requirement of the logistics industry, particularly distribution into and out of large scale NDCs. The development of competitive rail-linked strategic distribution sites is a crucial component in meeting this requirement. A number of major retailers have begun to contract rail services to transfer goods from their warehouses in the Midlands to their Scottish distribution centres e.g. Asda and Tesco. Sainsbury's have recently opted to build a new NDC at DIRFT, taking advantage of the site's rail terminal.

4. The need, as evidenced in Section 2 above, to develop large rail-served sites as a means of maintaining and enhancing regional competitiveness, and combating the emerging threat from other regions. The important conclusion to be drawn from analysis is 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 offers the most competitive location.

5. The national rail freight demand forecasts (as presented in Section 3 above), which suggest significant growth rates for intermodal rail freight over the next 20-30 years. The baseline assumptions for these forecasts include a significant expansion in the quantum of floor space which is rail-served. It is worth noting again 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. Further, the recently published draft NPS for National Networks also includes these forecasts, noting that it considers them 'robust' and 'that the Government has accepted them for planning purposes'.

6. A total of seven SRFIs (as defined by the draft NPS) or warehousing schemes which will have access to rail are currently under development or planned for the East Midlands region, providing around 2.9 million square metres of floor space. Given that rail-served sites are more complicated and capital intensive when compared with road only connected sites, it is unlikely that the promoters of these schemes would be pursuing their development in the absence of significant demand from the occupier market for rail-served distribution centre facilities.

5.9 Taking this evidence into account, we have therefore considered a much greater proportion of future new-build locating at rail-served sites, to satisfy both the policy and commercial requirements, while at the same time recognising that not all warehouse occupiers will benefit from or be of a nature to be attracted to rail-served strategic distribution sites (meaning that there will still be a need to plan for a significant proportion of future demand going to commercially attractive strategic logistics sites which are not connected to the railway network). This has taken into account the size of warehouse units currently located at the existing rail-served strategic distribution site in the East Midlands (DIRFT), other similar strategic developments elsewhere (e.g. Hams Hall) and the size of units being suggested by the developers of the planned for SRFIs in the region. From this, we conclude that it is

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.

5.10 Further, it is large scale warehouses greater than 25,000 square metres that will require the large plot sizes being planned for at SRFIs. The evidence presented in Part A suggests that the market is increasingly demanding facilities in excess of 50,000 square metres (12.5ha plot). Plots of this size are generally not available at existing general industrial sites or on 'recycled' brownfield land, meaning that new logistics sites will be required.

5.11 We have therefore considered the proportion of the current regional total floor space capacity which is in units greater than 25,000 square metres. Analysis of MDS Transmodal warehouse database for the East Midlands (sourced from VOA records – see Part A report) suggests that around 4.7 million square metres of the region's floor space capacity is in units greater than 25,000 square metres. This equates to *58% of the regional total*. This figure is consistent with the forecasts produced by MDS Transmodal and Savills for the East Midlands Development Agency in 2006 (which considered the size of new build units over the recent past). On that basis, the amount of land which will need to be brought forward at rail-served sites up to 2036 is shown in the table below. It is our view that this greater proportion of future new-build locating at rail-served sites (when compared with the existing position) should be considered as the preferred option going forward for planning purposes.

Table 5.2: Gross New-Build Floor Space and Land Required at Rail-served Sites to 2036 – Units More Than 25,000 sq metres to Rail-served Sites (58% of forecast demand)

	Gross New-build (000s sq m)					Land Required (ha)			
Year	2021	2026	2031	2036		2021	2026	2031	2036
Leicestershire									
Total - high	762	1,036	1,445	1,886		191	259	361	472
Total - low	594	811	1,130	1,369		148	203	282	342
Rail served - high	442	601	838	1,094		111	150	209	274
Rail served - low	344	470	655	794		86	118	164	199
East Midlands									
Total - high	2,918	4,001	5,570	7,286		730	1,000	1,393	1,822
Total - low	2,314	3,196	4,442	5,433		579	799	1,111	1,358
Rail served - high	1,693	2,321	3,231	4,226		423	580	808	1,057
Rail served - low	1,342	1,853	2,576	3,151		336	463	644	788

Land required - floor space is 40% of plot footprint

Total gross new-build as per Tables 4.3 and 4.4

5.12 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 rail-served land will need to be developed by 2036.

5.13 We have therefore considered 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. From the descriptions in Section 2.3 above, the following table outlines the floor space remaining and the quantum of land available at rail-served sites which have B8 consents in the region, along with the floor space/land planned for those schemes either currently being considered by the planning/DCO process or likely to be seeking consent over the next few years.

Table 5.3: 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

5.14 Around 717ha of land at rail-served sites can be expected to be developed up to 2036 in the region (though the analysis in Section 2 suggests that consent is granted and the schemes are operational by 2026). In Leicestershire, the equivalent figure is 159ha, which equates to around 22% of the regional total (noting that currently 27% of the region's strategic floor space capacity is in Leicestershire). Approximately 491ha is located in the broader 'golden triangle', with the sites in Corby and East Midlands Intermodal Park being marginally to the east and west respectively. The table below consequently compares the forecast demand

with the likely land supply at rail-served sites to 2036. We have assumed that all of the schemes outlined in the table above receive consent by 2021.

Table 5.4: 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
Forecast demand - low	86	118	164	199
Shortfall – high*	48	9	-50	-115
Shortfall – low*	73	41	-5	-40
East Midlands				
Supply - Land planned for rail-served sites	717	717	717	717
Forecast demand - high	423	580	808	1,057
Forecast demand - low	336	463	644	788
Shortfall – high*	294	137	-91	-340
Shortfall – low*	381	254	73	-71

** land supply – forecast demand*

5.15 The preferred high replacement scenario suggests that around *115ha of new land at rail-served sites* will need to be brought forward by 2036 once existing consents and potential sites are accounted for. 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. Across the region as a whole, the preferred high replacement scenario suggests a further 340ha of land at new rail-served sites will need to be brought forward by 2036. Similarly, this suggests another *3 SRFIs* will need to be brought forward up to 2036 in addition to those currently being planned, again taking into account the size of the SRFIs currently being developed. When considered in practical terms, on the basis of a high replacement scenario two or more of the SRFIs required in the region up to 2036 could be accommodated within Leicestershire.

Section 5.2: Road Only Sites – Demand and Supply

5.16 While a much greater proportion of future new-build can be expected to locate at rail-served sites, as concluded earlier there will still be a need to plan for commercially attractive strategic logistics sites (with an appropriate geographical spread) which are not rail-served. 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, and as demonstrated in Section 2, road based only distribution still performs well compared with sites to the north/east of the golden triangle. Therefore, having accounted for the proportion of future demand that will seek a rail-served location, we have subsequently considered the remaining proportion of forecast demand (42%) which will need to be accommodated at commercially attractive strategic logistics sites which are not connected to the railway network. This could be vacant plots at existing general industrial sites, new sites or 'recycled' land at existing B8 sites. This is shown in the table below.

Table 5.5: Gross New-Built Floor Space and Land Required at Road-only Connected Sites to 2036

	Gross New-build (000s sq m)					Land Required (ha)		
Year	2021	2026	2031	2036	2021	2026	2031	2036
Leicestershire								
Total - high	762	1,036	1,445	1,886	191	259	361	472
Total - low	594	811	1,130	1,369	148	203	282	342
Road only - high	320	435	607	792	80	109	152	198
Road only - low	249	341	474	575	62	85	119	144
East Midlands								
Total - high	2,918	4,001	5,570	7,286	730	1,000	1,393	1,822
Total - low	2,314	3,196	4,442	5,433	579	799	1,111	1,358
Road only - high	1,226	1,681	2,339	3,060	306	420	585	765
Road only - low	972	1,342	1,866	2,282	243	336	466	571

Land required - floor space is 40% of plot footprint
Total gross new-build as per Tables 4.3 and 4.4

5.17 The preferred high replacement scenario suggests 765ha of land at non rail-served sites 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).

5.18 As per the rail-served sites analysis, we have subsequently considered the quantum of land that is currently available at existing (non rail-served) sites *with B8 consents* in Leicestershire and across the wider region. 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.. This is analysis shown in the tables below.

Table 5.6: Site Supply - Existing Road-only Sites with B8 Consents in Leicestershire

Site	District	Strategic B8 Land Available (ha)	Approximate floor space available (sq m)	Comments
Optimus Point Glenfield Road, Kirby Road/Ratby Lane	Blaby	12.5	62,400	Developer – Wilson Bowden. Part of the Blaby SUE. Outline consent for B1, B2 and B8 uses. Good accessibility from A46 at Junction 21a of M1 motorway. Design and build available for buildings from 1394 sq m to 46,451 sq m. Currently actively marketed by DTZ.
New Lubbesthorpe	Blaby	14.2	56,700	Developer – Hallam Land. Outline planning permission for B1/B2/B8. Part of Lubbesthorpe SUE. Adjacent to M1/M69 motorways. Funding now obtained for new bridge to be constructed over M1 to improve connectivity with Leicester City centre Bridge completion date anticipated August 2015. B8 units not currently marketed.
Barwell West. Ashby Road, Barwell. (Part of Barwell SUE)	Hinckley and Bosworth	3.1	12,400	Developer- Barwood/Taylor Wimpey. Outline consent as part of Barwell SUE. Connectivity reasonable with Junction 2 of M69 circa 5 miles to South. Capacity for one isolated large scale distribution unit but located adjacent to new residential development. Not currently actively marketed.

Logix 2, Rugby Road, Burbage (Hinckley Logistics Park))	Hinckley and Bosworth	3.2	15,800	Developer – Goodman. Detailed B8 consent. Located 1.5 miles from Junction 1 of M69 via A5, 17 miles from Junction 21 of M1. Connectivity good but potentially affected by A5 congestion. One speculative 15,329 sq m unit currently under construction and available November 2014. Currently marketed by Savills and NRS.
Interlink Distribution Park, Stanton, nr Bardon. (Prime Link)	Hinckley and Bosworth/North West Leicestershire	2.75	11,000	Developer – Wilson Bowden. B1, B2, B8 consent Formed part of Coalville SUE. Good connectivity – 2.5 miles from Junction 22 of M1 motorway. Design & Build opportunities available from 1,394-11,000 sq m (15,000-118,404 sq ft). Capacity for only one large scale distribution unit. Currently marketed by Wilson Bowden.
Interlink Distribution Park, Stanton, nr Bardon. Maximus 22	Hinckley and Bosworth/North West Leicestershire	5.9	23,226	Developer - Maximus. B1, B2, B8 outline consent. Good connectivity – 1.5 miles from J22 of the M1. Could accommodate a single building of 23,226 sq m or several smaller buildings. Currently marketed by CBRE and NRS.

Ivanhoe Business Park, Ashby de la Zouch	North West Leicestershire	3.5	15,800	Developer – Clowes. B1, B2, B8 outline consent. Located 2 miles from J13 of the A42 and 11 miles from J22 of the M1. Connectivity reasonable. Design and Build opportunities are from 929 - 15,794 sq. m (10,000 - 170,000 sq. ft) therefore capacity for only one large scale distribution unit. Currently marketed by DTZ and Salloway.
Total		**45.15**	**196,326**	

Source: Savills

Table 5.7: Existing Road Only Sites with B8 Consents – Rest of East Midlands

Site	Strategic B8 Land Available (ha)	Approximate B8 floor area available (sq m)	Comments
Derbyshire			
Dove Valley Park, Dove Valley Park, Derby, DE65 5BY	19	72,000	Developer – Clowes
	24	120,000	Located on A50 – M1/M6 link road at Foston. (Phase 2)
Derby Logistics Park, Derbyshire, DE21 7BH	24	172,800	Developer –Goodman 2 miles east of Derby, adjacent to A6 with good access to M1.
Markham Vale, Chesterfiled, Derbyshire, S44 5HY	31	124,000	Developer - Henry Boot Junction 29A of M1.
West Hallam Industrial Park, Cat & Fiddle Lane, Ilkeston, DE7 6HE	25	65,032	Developer – Delancey 7.8 miles from J25 of M1, 8.5 miles north east of Derby.
Northamptonshire			
Prologis Park, Kettering' Northamptonshire	12.5	32,700	Developer – Prologis 3 miles from Junction 7 of A14
Warth Park Warth Park Way Wellingborough NN9 6NY	15	80,000	Developer- Roxhill Adjacent to the main arterial route (A45); 3.4 miles from the A14 to the east and 21 miles from the M1 to the west.

Prologis Apex Park, Daventry, Northamptonshire	17.2	66,000	Developer- Prologis. Adjacent to A45, 1.5 miles north of Daventry town centre, close to M1.
G Park, Daventry Northamptonshire	6.5	32,000	Developer – Gazeley 7.5 miles from J17 M1.
Nottinghamshire			
G Park, Newark, Nottinghamshire, NG24 2ER	39	768,000	Developer – Gazeley 40 miles from J21 of M1 via A46 (duelled)
Blenheim Industrial Estate, Nottinghamshire, NG6 8WB	6.5	32,500	Developer - Wilson Bowden J26 of M1 2 miles; 4.5 miles north west of Nottingham City Centre
Future Point, Newark, Nottinghamshire, NG24	48.5	103,000	Developer - Catesby Access to J27 of M1 28 miles to the west via A46.
Castlewood, J28. Mansfield, Nottinghamshire, NG17 1JF	24	18,580	Developer - Clowes Adjacent to J28 of M1
Vertical Park, Nottingham, DN22 8DQ	81	185,800	Developer - Gladman. Location remote.
Nottingham 26, Eastwood, Nottinghamshire	22.3	83,612	Developer IM. Adjacent J26 of M1. Outline consent for B1/B2/B8.
Summit Park, Mansfield, Nottinghamshire	18.2	84,913	Developer Sladen Estates. 4.5 miles from Junction 28 of M1.
Sherwood Oaks, Mansfield	6	27,870	Developer Regal 8 miles from Junction 28 of M1.

Warwickshire			
Birch Coppice Regional Logistics Site	20	80,000	Developer - IM. Intermodal Freight Park at Junction of M42/A5. About to speculatively build circa 14,000 sq m
Rugby Gateway, Rugby CV23 0WE	36	167,000	Developer – Roxhill Adjacent J1 M6
Whitley Business Park, Coventry	7.5	37,500	Developer - St Modwen Direct access to A45. M6 J2 at 6 miles.
Total	**483.2**	**2,353,307**	

Source: Savills

5.19 Around 45ha is 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). 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 (Section 2).

5.20 Consequently, taking the above existing supply into account the table below consequently compares the forecast demand with the likely land supply to 2036.

Table 5.8: 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
Forecast Demand - low	62	85	119	144
Shortfall – high*	-35	-64	-107	-153
Shortfall – low*	-16	-40	-74	-99
East Midlands				
Total Supply - Available at current sites	528	528	528	528
Forecast Demand - high	306	420	585	765
Forecast Demand - low	243	336	466	571
Shortfall – high*	222	108	-57	-237
Shortfall – low*	285	192	62	-43

** land supply – forecast demand*

5.21 The preferred high replacement scenario suggests around *153ha of new land at road only 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 of new land will need to be brought forward up to 2036. However, as noted above 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 (Section 2).

5.22 It was noted in Section 4 that 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. 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 existing functionally obsolete building can be substantially

refurbished and then re-let for a similar use (e.g. for new occupier and cargo type). Occasionally, the unit may be demolished, allowing the plot to be 'recycled' for a new building (in some cases it may be cheaper to clear the plot and develop a new-build unit). 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. Such land adjacent to or within urban areas can be released for other employment uses or non employment use such as residential.

5.23 The amount of land which could potentially be 'recycled' in this manner up to 2036 at existing commercially attractive sites in the East Midlands/Leicestershire should therefore be factored into the above demand/supply equation (and before a 'search' or 'call' for new sites is commenced). A high level assessment of existing industrial land and sites with B8 consents, based on the limited data currently at hand, has been undertaken and this suggests that across the East Midlands around 200ha of land at commercially attractive sites could potentially be recycled for further strategic distribution activity up to 2036 (either the refurbishment of the existing building or demolition and re-build). Around 90ha of this land is estimated to be located in Leicestershire.

5.24 On the basis that these figures are robust and broadly accurate the table below illustrates, purely for example purposes, the impact on the supply-demand-shortfall figures presented above for Leicestershire to 2036.

Table 5.9: Demand, Potential Land Supply and Shortfall to 2036 – Accounting for Recycled Land

	Ha
Leicestershire	
Supply available at current sites	45
Forecast Demand - high	198
Forecast Demand - low	144
Shortfall – high*	-153
Shortfall – low*	-99
Potential recycled land	90
Shortfall (inc recycled land) – high	-63
Shortfall (inc recycled land) – low	-9

** supply – forecast demand*

5.25 Clearly, the quantum of floor space which could be refurbished or 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. However, investigations concluded there is currently no reliable data or relevant primary research readily at hand for Great Britain that would allow the above figure to be verified or otherwise in a robust manner (i.e. could withstand 'testing' at examination or inquiry). It is understood that developers ProLogis have previously examined this issue, but this was based on sites and units near Lyon in France. Also, it is not possible to conduct the necessary primary research within this study, given its scope and budget, that would allow a robust figure to be established. Such primary research would involve substantial surveying of existing landlords, developers and occupiers. On that basis, it is not possible at present to robustly quantify the amount of recycled land potentially available up to 2036, and as a result the figures quoted above have not therefore been included in the supply-demand analysis.

5.26 Given that a short fall between future demand and existing supply has been identified (see above), identifying and quantifying the amount of recycled land potentially available (and where it is located) should be undertaken before a 'search' or 'call' for new sites is commenced. The outputs from this exercise can 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, this exercise would be best undertaken by means of a future study commission, which could undertake the necessary surveying of occupiers/landlords and ultimately arrive at a robust quantification.

5.27 It is likely that the opportunities to recycle plots for new buildings will be at 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. However, in many cases 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 (such land adjacent to or within urban areas can be released for non employment use). Such land, now poorly suited for strategic distribution, can potentially be released for non-employment use. This can include new residential developments.

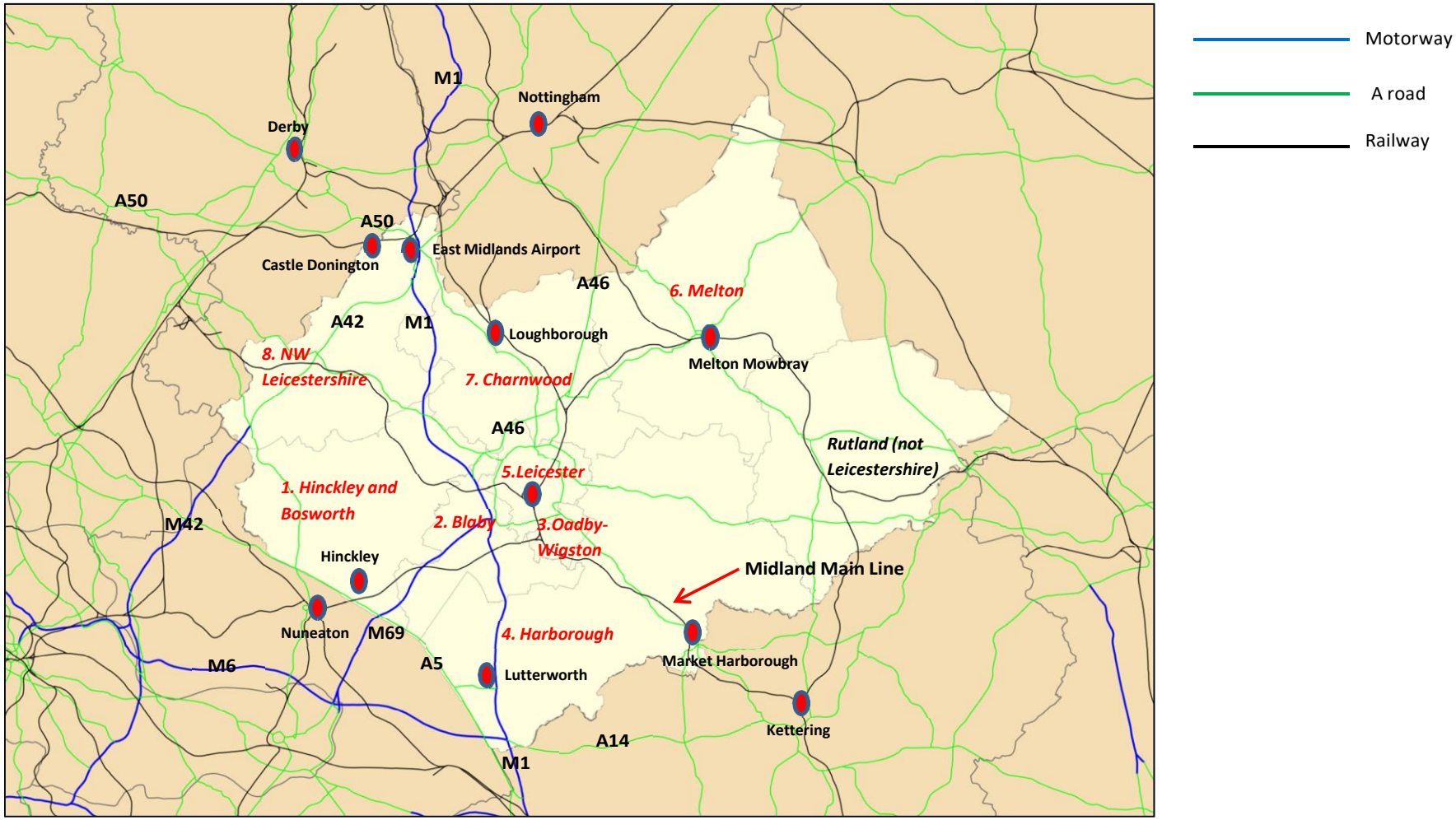
6. KEY AREAS OF OPPORTUNITY

6.1 Given the land short-fall identified in the analysis from the previous Section and using a criteria based approach, the main aim of this section has been to identify general broad areas across Leicestershire and the East Midlands region where new commercially attractive logistics sites should be located (key areas of opportunity). These would be sites, of the size, scale, location and transport connectivity required by the market, which could potentially be available to 'fill' the long-term short-fall identified in the previous section. In line with the study terms of reference, the report does not consider, assess or recommend specific sites.

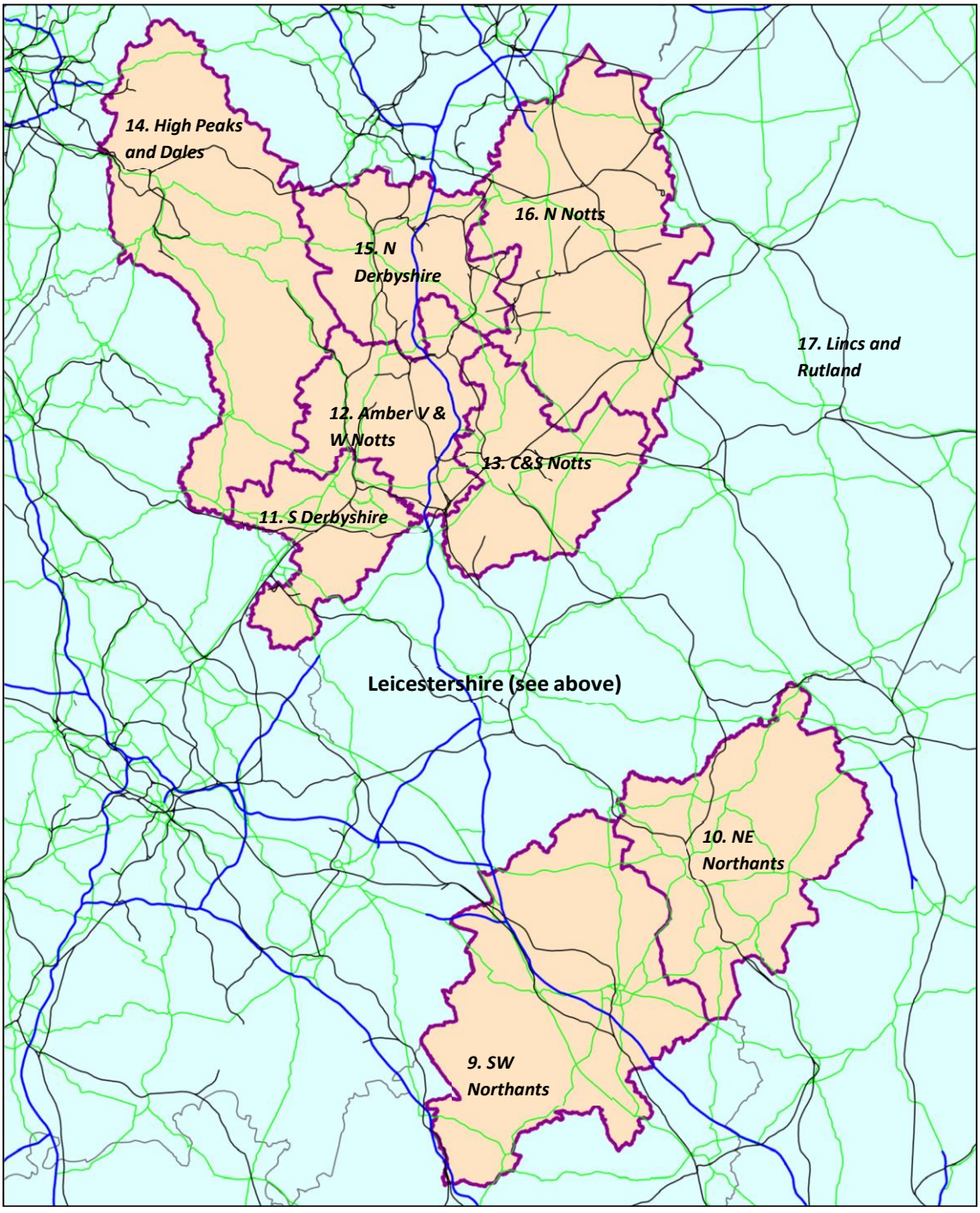
6.2 The first task was to divide the East Midlands region into a number of broad sub-regions. The sub-regions, which have been defined solely for the purposes of this study, are the eight local planning authorities within the county of Leicestershire, along with groupings of local planning authorities in the rest of the East Midlands which reflect transport corridors in the region (these are the same sub-regions adopted for the *East Midlands Logistics Study in 2006*, undertaken by MDST and Savills[11]). The 17 sub-regions are displayed in the following maps.

[11] East Midlands Logistics Study, for the East Midlands Development Agency 2006 (MDST and Savills)

Map 6.1: East Midlands Sub-regions - Leicestershire



Map 6.2: East Midlands Sub-regions – not Leicestershire



6.3 The following is a brief description of each sub-region's delimitation.

Leicestershire

1. Hinckley and Bosworth.
2. Blaby.
3. Oadby and Wigston.
4. Harborough.
5. Leicester.
6. Melton.
7. Charnwood.
8. North West Leicestershire.

Rest of East Midlands

9. SW Northants - Covers the administrative authorities of Northampton, Daventry and South Northants.
10. NE Northants - Covers the administrative authorities of Corby, Kettering, Wellingborough and East Northants.
11. S Derbyshire - Covers the administrative authorities of South Derbyshire and Derby.
12. Amber Valley and West Notts - Covers the administrative authorities of Amber Valley, Ashfield, Broxtowe and Erewash.
13. Central and S Notts - Covers the administrative authorities of Nottingham, Gedling and Rushcliffe
14. High Peak and Dales - Covers the administrative authorities of High Peak, Derbyshire Dales and the Peak District national park.
15. N Derbyshire - Covers the administrative authorities of Chesterfield, North East Derbyshire, Bolsover and Mansfield.
16. N Notts - Covers the administrative authorities of Bassetlaw and Newark & Sherwood.
17. Lincolnshire and Rutland.

6.4 Each sub-regional area has subsequently been assessed against the following criteria:

- Good connections with the strategic highway network i.e. served by motorways or long-distance dual carriageways, or likely to be served by such routes when taking into account known highway infrastructure upgrades;
- Good connections with the railway network i.e. served by a railway line offering a generous loading gauge (minimum W9, therefore able to convey the tallest intermodal units) or those routes which are earmarked for capacity and/or loading gauge enhancements (enhancement projects for the SFN over the 2014-2019 Control Period);
- Appropriately located relative to the markets to be served – specifically, location in relation to the 'golden triangle'; and
- Is accessible to labour and located close to areas of employment need.

6.5 These are essentially the criteria outlined and described in the Part A report concerning commercially attractive strategic logistics sites, albeit minus the criteria which relate specifically to actual sites (size, configuration and neighbouring land uses). It should be noted that the assessment takes into account the highway and railway infrastructure upgrades as described in Section 2 earlier.

6.6 Broad areas within the eight Leicestershire sub-regions which meet all the criteria are identified below. These are essentially where the qualifying railway lines and strategic highway corridors are in proximity, meaning they are suitable for road and rail-served served strategic distribution

1. Hinckley and Bosworth - Southern part of market area where Leicester-Nuneaton railway line passes close to the M69/A5.
2. Blaby - Central part of market area (on east-west axis) where Leicester-Nuneaton railway line passes close to the M69 and M1.
7. Charnwood - Central part of the market area (on north-south axis) where the Midland Main Line passes alongside the A6 and A46. Eastern part of the market area where the Peterborough-Leicester line passes alongside the A46.
8. North West Leicestershire - Northern part of market area where M1, A42, A50 passes close to the freight only line connecting the Midland Main Line (at Trent Junctions) to the Derby-Birmingham line.

6.7 On a similar basis, broad areas within the eight Leicestershire sub-regions which meet the criteria with the exception of 'good connections to the railway network' have also been identified. These are potential areas suitable for road-only based strategic distribution.

1. Hinckley and Bosworth – *Road only* in the north-eastern part of the market area along the M1
2. Blaby – *Road only* in the southern part of the market area with direct access to the M1
4. Harborough - *Road only* in the western and north-western part of the market area with direct access to M1, M6, A14 and A5.
7. Charnwood - *Road only* in the western part of the market area along the M1
8. North West Leicestershire - *Road only* in the western part of the market area along the A42 corridor. *Road only* in the eastern part of the market area along the M1

6.8 The assessment is presented in the Appendix 4 to this report, while the key areas of opportunity are outlined below.

Leicestershire – Key Areas of Opportunity

6.9 The broad areas identified within each Leicestershire sub-region above have been combined and re-organised reflecting transport corridors in order to form *Key Areas of Opportunity* within Leicestershire. These are listed below in no particular order of priority.

Rail and road served Key Areas of Opportunity

- Key Area A: *Leicester to Hinckley corridor* – combining the areas identified within Hinckley and Bosworth (1.) and Blaby (2.);
- Key Area B: *Midland Main Line North corridor* – the areas identified within Charnwood (7.); and
- Key Area C: *East Midlands Airport to south Derby corridor* – the area identified within North West Leicestershire (8.).

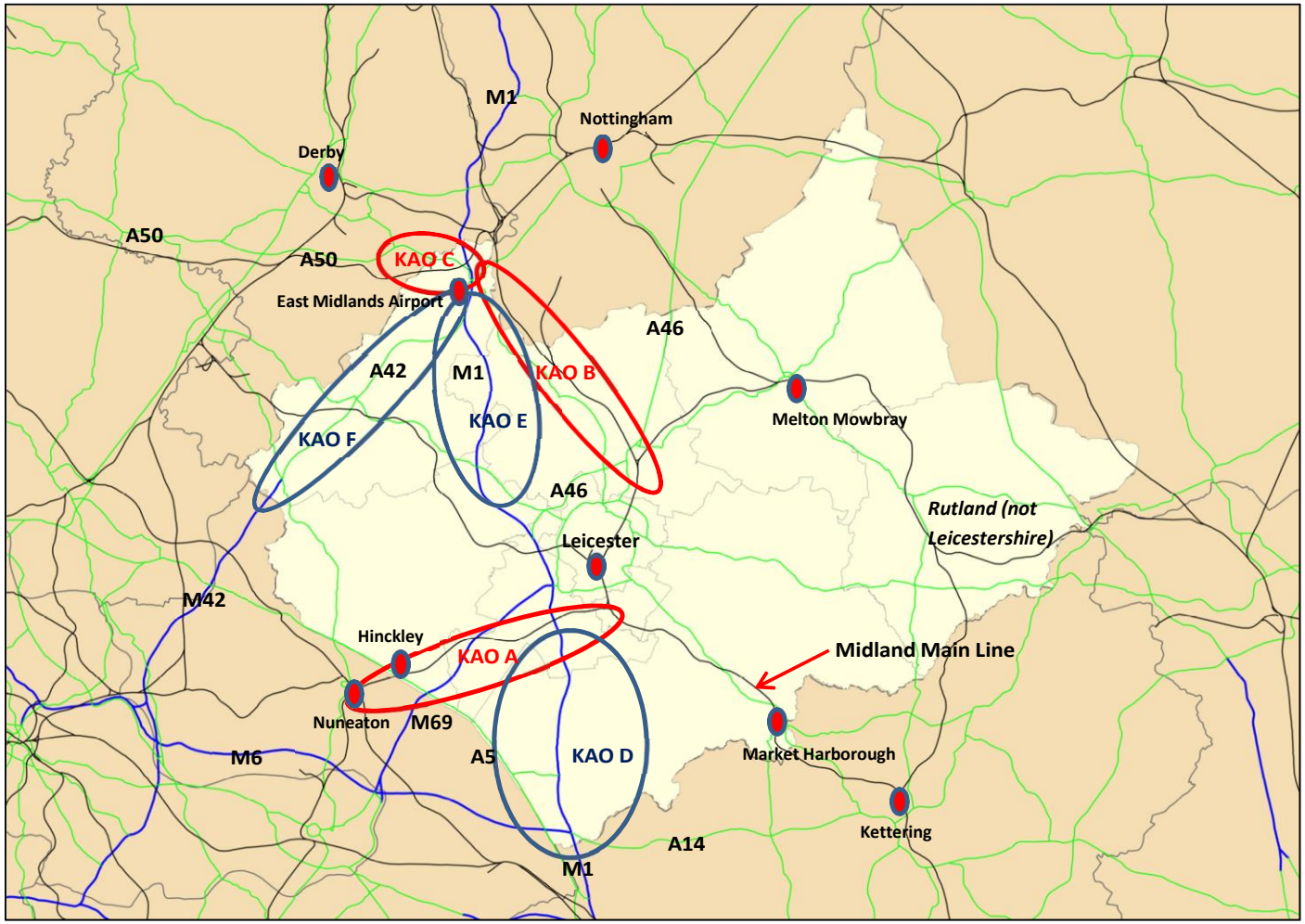
Road-only served key Areas of Opportunity

- Key Area D: *M1 South corridor* – the areas identified within Blaby (2.) and Harborough (4.)
- Key Area E: *M1 North corridor* – combining the areas identified within Hinckley and Bosworth (1.), Charnwood (7.) and North West Leicestershire (8.)
- Key Area F: M42/*A42 corridor* – combining the areas identified in North West Leicestershire (8.)

6.10 Maps 6.3 shows (indicatively) these key areas of opportunity. It should be noted that the Key Areas of Opportunity cover multiple local authorities and potentially extend into neighbouring authorities outside Leicestershire. Those enclosed in red are key areas of opportunity for both rail 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 the planners will need to focus their searches and consider making provision for new strategic logistics sites. As noted earlier, in line with the study terms of reference specific sites have not been assessed or recommended.

Map 6.3: Key Areas of Opportunity - Leicestershire

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



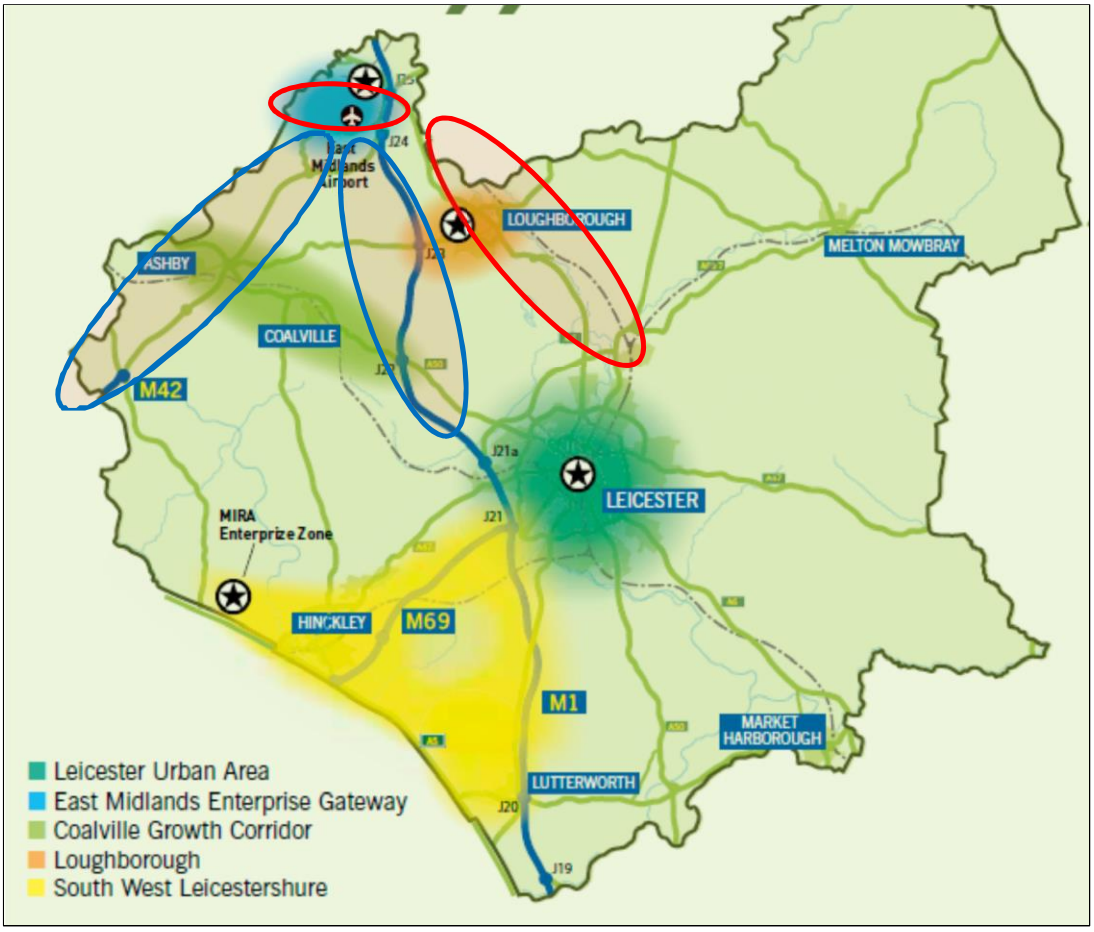
Key Areas of Opportunity (KAO) – road linked

Key Areas of Opportunity (KAO) – both rail-linked and road only connected sites

6.11 Two interesting observations emerge from this analysis. Firstly, with respect to Key Area A (Leicester-Hinckley), the combined affect of the railway enhancement schemes and the potential highway proposals currently being explored by Leicestershire County Council (Section 2) would be to open up the sub-regional area between the M69 and M1 as key areas of opportunity for rail-linked strategic distribution (i.e. the southern part of Hinckley and Bosworth and the central part of Blaby local government areas). While this sub-regional area is served by the Leicester-Nuneaton railway line, it is currently poorly served with regards to connections to the strategic highway network (limited access at M69 Junction 2 and access to the M1 being via circuitous routes to M1 Junction 21/M69 Junction 3). In the absence of better highway connectivity, these sub-regional areas could not be considered as key areas of opportunity. Likewise, parts of Key Area D (M1 South) would also become potential areas for road only connected strategic distribution should it be possible to create a new point of access to the M1; this would not be the case without improved access to the strategic highway network.

6.12 Secondly, with the exception of the City of Leicester all of the identified key areas of opportunity coincide with the LLEP's Strategic Economic Plan Growth Areas. This is shown on the map below.

Map 6.4: LLEP Growth Areas and Key Areas of Opportunity



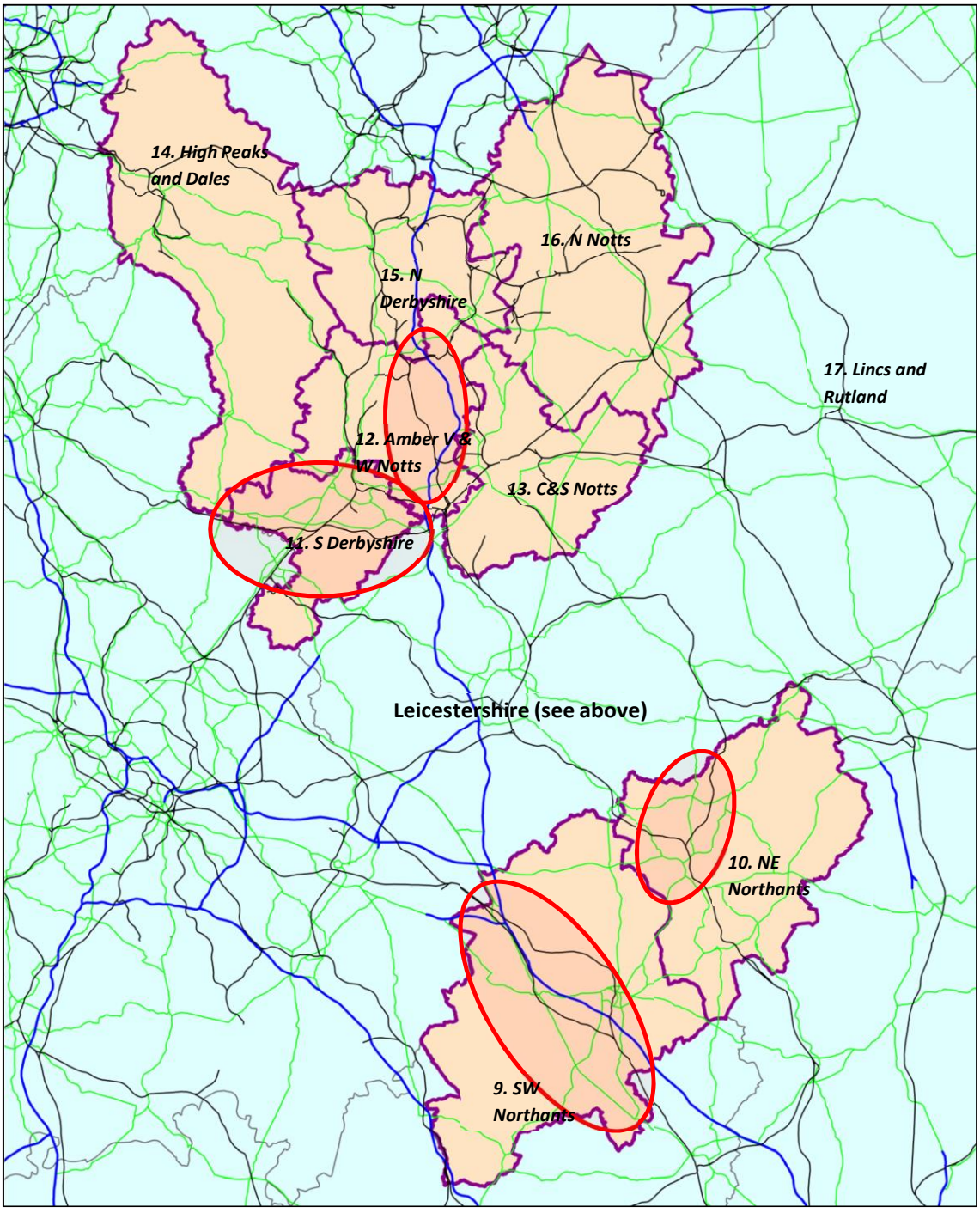
6.13 One sub-regional area which currently cannot be considered a key area of opportunity is the A6/Midland Main Line corridor to the south and south-east of Leicester (central part of the Harborough market area on north-south axis). Despite the railway enhancements planned for the Midland Main Line (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 is a significant impediment to the area's attractiveness to the logistics sector.

Rest of East Midlands – Key areas of Opportunity

6.14 Broad areas within the rest of the East Midlands sub-regions which meet all the criteria are outlined below and illustrated on the map following.

10. SW Northants - Broad north-south axis through the centre of the market area where the West Coast Main Line passes close to the M1 and A43.
11. NE Northants - Broad east-west axis through the centre of the market area where the Midland Main Line passes close to the A14.
12. S Derbyshire - Broad east-west axis through the southern part of the market area where the freight only line connecting the Midland Main Line to the Derby-Birmingham line (and by the Derby-Birmingham line passes close to the A50 and A38.
13. Amber Valley and West Notts - Broad north-south axis along the eastern edge of the market area where the Midland Main Line (Erewash valley Line) passes close to the M1 and A38.

Map 6.5: Key Areas of Opportunity – Rest of East Midlands



6.15 At this stage of the analysis, it is necessary to consider whether there is a hierarchy of key areas of opportunity. Some areas may meet the criteria to a higher level than others, and logically will therefore accommodate the most commercially attractive sites. Consequently a further analysis of the recommended sub-regions has therefore been conducted.

6.16 Essentially, only those key areas of opportunity 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'). Six 'best key areas of opportunity' have been identified, of which three are located in Leicestershire. A further four areas meet the criteria, albeit to a lower level (either not offering rail connections or being located slightly to the north of the golden triangle), of which three are in Leicestershire. These have been termed 'good key areas of opportunity'. The best and good key areas of opportunity 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*.

Best key areas of opportunity – Rest of East Midlands

- SW Northants (10.);
- NE Northants (11.); and
- S Derbyshire (12.)

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.*

Good key areas of opportunity – Rest of East Midlands

- Amber Valley and West Notts (13.)

Identifying and Assessing Specific Sites

6.17 With respect to identifying and assessing specific sites to fill the short fall identified, Section 5 of the Part A report set out the key locational characteristics of a commercially attractive logistics site. For completeness, the criteria are listed below, while reference should be made to the Part A report for an explanation/description of the rationale underlying the identified criteria.

6.18 Commercially attractive rail-served strategic logistics sites are considered to be ones which meet the following criteria:

- Good connections with the strategic highway network;
- 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

6.19 It is against these criteria that future commercially attractive sites should be identified and assessed. Road only sites can be considered ones which meet all the other criteria outlined above, bar the modal choice requirements outlined above and the rail terminal facilities criteria.

7. EMPLOYMENT AND ECONOMIC BENEFITS

7.1 The Part A report presented a detailed analysis of existing employment in the strategic distribution sector in Leicestershire and the subsequent contribution to Gross Value Added. The main aim of this section of the report is twofold, namely:

- To estimate the total additional employment likely to be generated in the Leicestershire sub-region and East Midlands region resulting from meeting the forecast growth in warehouse floor space capacity; and
- The contribution to regional Gross Value Added resulting from the generated employment.

7.2 Section 4 forecast that large scale warehouse floor space capacity in Leicestershire would increase by around 244,000 sq metres up to 2036. For the East Midlands region, the growth in floor space is forecast to be around 1.4 million sq metres over the same period. When considering the estimated generated employment, it is the net growth in floor space (the growth build element) that needs to be considered rather than the gross new-build floor space. For example, consider a distributor who currently occupies a 40,000 square metre facility in Leicestershire which employs 500 full-time equivalent or FTE (at 80 sqm per FTE) The existing unit is now functionally obsolete and the distributor subsequently moves to a new 60,000 square metres facility in the county which would employ 750 FTEs. Assuming that existing staff transfer to the new building when the old one closes, the new jobs consequently generated by the new-build warehouse would be 250 FTEs.

7.3 Using the employment density ratio for large high-bay warehousing presented in the Part A report i.e. 80 sq metres per FTE, the number of direct jobs the forecast growth in warehouse floor space capacity is likely to generate can be estimated. In Leicestershire, this is estimated to be just over 3,000 jobs up to 2036, while across the wider East Midlands the figure is estimated to be around 17,500.

7.4 In addition, we would expect further jobs to be created in the wider logistics sector supporting this activity. The BRES 2012 (Provisional) dataset allows the number of employees nationally in warehousing and storage activities to be compared with the number employed in wider supporting roles e.g. HGV drivers. This is shown in the table below, and suggests that for every one warehousing job a further 1.35 jobs are supported in the wider sector.

Table 7.1: Total Employees in Warehousing/Storage and the Wider Logistics Sector

Job	SIC Code	Total Employees (000s)
Rail freight	49200	5.5
Road freight	49410	190.6
Rail terminals	52211	0.1
Services incidental to land transport	52219	71.3
Cargo handling land transport	52243	0.5
Warehousing and storage	52103	199.2
Warehousing:support jobs		1.35

Source: BRES 2012 Provisional

7.5 On that basis, in Leicestershire just over 4,100 jobs are likely to be created in supporting activities while across the wider East Midlands the figure is estimated to be around 23,700. The table below therefore shows the total estimated employment generation associated with the new-build and land use forecasts from Sections 4 and 5. For Leicestershire, by delivering in full the new-build forecasts in Sections 4 and 5 (by means of allocating sufficient land through local plans) it is estimated that just over *7,100 new jobs* will be created.

Table 7.2: 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)

7.6 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. On that basis, the table below estimates the impact on regional GVA resulting from the direct and supporting jobs created. For Leicestershire, by delivering in full the new-build forecasts in Sections 4 and 5 (by means of allocating sufficient land through local plans), it is estimated that *GVA will increase by around £297 million* (at 2014 prices).

Table: 7.3: 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**

7.7 The economic benefit estimates presented above are predicated on all the forecast new-build being accommodated within the region/sub-region i.e. sufficient land at suitable sites is brought forward to meet the implied short-fall (as per the analysis in Section 5). However, 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 noted in Section 4 above, most new-build floor space is actually replacing existing obsolete capacity (in most cases functionally obsolete but in some cases physically obsolete units). Consequently, the replacement capacity along with the growth build element would migrate to other regions given a lack of sites in the golden triangle, leading to an overall reduction in regional floor space and employment in the sector. This clearly has GVA and employment implications.

7.8 For example, again consider a distributor who currently occupies a 40,000 square metre facility in Leicestershire which employs 500 FTEs, and who seeks to develop a new 60,000 square metres facility which would employ 750 FTEs. If the distributor were forced to relocate to another region due to a lack of suitable sites, the net reduction in floor space would be 40,000 square metres and job losses of 500 FTEs (on the basis that the old warehouse unit is demolished).

7.9 The identified land 'short-fall' for the high replacement scenario (Section 5), when equated as warehouse floor space, is just over 15% of the existing capacity in the region. We have therefore estimated the impact on employment resulting from an overall 10%, 15% an 20% reduction in the region/sub-region's warehouse floor space capacity (when compared with the existing total, as per the Part A report). The same methodology as used to estimate jobs created has been adopted. The estimated reduction in warehousing and wider logistics sector supporting employment is presented in the table below.

Table 7.4: Estimated Reduction in Employment

	East Midlands	Leicestershire
Existing floor space (000s sq m)	8,056	2,250
Total floor space - 10% reduction (000s sq m)	7,250	2,025
Total floor space - 15% reduction (000s sq m)	6,848	1,913
Total floor space - 20% reduction (000s sq m)	6,445	1,800
Direct jobs (FTEs) - 10% reduction	10,070	2,813
Direct jobs (FTEs) - 15% reduction	15,105	4,219
Direct jobs (FTEs) - 20% reduction	20,140	5,625
Supporting jobs (FTEs) - 10% reduction	13,595	3,797
Supporting jobs (FTEs) - 15% reduction	20,392	5,695
Supporting jobs (FTEs) - 20% reduction	27,189	7,594
Total jobs (FTEs) - 10% reduction	23,665	6,609
Total jobs (FTEs) - 15% reduction	35,497	9,914
Total jobs (FTEs) - 20% reduction	47,329	13,219

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)

7.10 The impact on GVA resulting from these job reductions is presented in the table below.

Table 7.5: Estimated Job Reduction and Impact on GVA

GVA	£ million (2014 prices)	
	East Midlands	Leicestershire
Direct jobs (FTEs) - 10% reduction	-£417.9	-£116.7
Direct jobs (FTEs) - 15% reduction	-£626.9	-£175.1
Direct job losses (FTEs) - 20% reduction	-£835.8	-£233.4
Supporting jobs (FTEs) - 10% reduction	-£564.2	-£157.6
Supporting jobs (FTEs) - 15% reduction	-£846.3	-£236.4
Supporting jobs (FTEs) - 20% reduction	-£1,128.3	-£315.1
Total - 10% reduction	-£982.1	-£274.3
Total - 15% reduction	-£1,473.1	-£411.4
Total - 20% reduction	-£1,964.2	-£548.6

7.11 The analysis above therefore 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 (LLEP area), this would subsequently generate *a reduction in regional GVA of between £274 million and £548 million* (at 2014 prices).

8. SUMMARY AND CONCLUSION

8.1 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. 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 quantum of large scale warehouse 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 (capacity being significantly more than is required to handle the volume of cargo distributed into the East Midlands regional economy).

8.2 Consequently, the sector has generated high levels of employment and provides a significant contribution to both regional and LLEP area Gross Value Added (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.

8.3 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.

8.4 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.

8.5 On the basis that Leicestershire wishes to maintain the identified established competitive advantage (alongside the resultant economic benefits) and grow the sector, it was shown in Section 2 of the Part B report that 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). A 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.

8.6 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 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 (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. 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.

8.7 The analysis undertaken in Section 7 above suggests that 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* in Leicestershire. The contribution to Gross Value Added in Leicestershire resulting from the generated employment is estimated to be *additional £297million* (at 2014 prices).

8.8 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 throughout 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 (along with the jobs sustained by the existing capacity).

8.9 Section 7 above 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 generate a *reduction in regional Gross Value Added of between £274 million and £548 million* (at 2014 prices).

8.10 The main focus of any strategy for the strategic logistic sector in Leicestershire should therefore be 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.

APPENDIX 1

Study Terms of Reference Part B

B. Planning for Change / Growth - Strategic Spatial Planning Context (40%)

Identify future strategic distribution need to 2031 (and indicatively to 2036) and apply the insight from Part A to formulate growth options to meet Leicester & Leicestershire's need in the most sustainable and beneficial way.

a. Define / describe and analyse the strategic distribution sector in Leicester & Leicestershire – including types of operations (i.e. SRFI, RDC's, NDC's), physical characteristics (i.e. pattern, nature / age of current stock), markets and operators (i.e. food, non-food, manufacturing, express operators, internet fulfilment etc.) and any functional relationships / dependencies both within & beyond the Leicester & Leicestershire area.

b. Undertake and critically assess the Strengths Weaknesses Opportunities and Threats (SWOT) of the Leicester & Leicestershire strategic distribution sector, in the context of the wider Golden Triangle / adjacent LPA areas. Identify any significant economic, infrastructure, or environmental challenges and interdependency / competition issues that present potential constraints or opportunities for sector growth in Leicester & Leicestershire / or it's constituent parts (LPA areas).

c. Forecast the future Strategic Distribution Sector (B8) requirement for Leicester & Leicestershire to 2031(and indicatively to 2036) – assess any alternative scenarios (i.e. base-case / low, medium, high growth) and their relative merits in delivering economic growth aspirations (e.g. GVA, job creation / skills match)

d. Differentiate forecast requirements between the need for road-based, rail-linked and airport-linked provision for the sector and any provision to serve specific sub markets / priority sectors (see footnote [4.]).

e. Review the quantitative & qualitative adequacy of current sites & potential land supply across Leicester & Leicestershire against forecast need and identify gaps.

f. Identify reasonable option/s to fill gaps (meet forecast need) for the preferred growth scenario (to be agreed via the Duty to Cooperate mechanism) – taking account of the evidence & insight provided by Part A & preceding elements of Part B of the study. Each

option should consider the; type, spatial pattern (nodes / direction of), quantitative distribution across the area, and any changes to the future role & contribution of existing sites / property.

g. Assess the relative merits of the option/s in terms of sustainable development (e.g. economic, social and environmental effects) at a strategic level. Recommend & justify a preferred option, and reasons for discounting alternative options, for managing and delivering strategic distribution growth to meet need in Leicester & Leicestershire

h. In the event that Leicester & Leicestershire can't wholly meet its own development requirements for strategic distribution, recommend actions and establish parameters for Duty to Co-operate discussions across county boundaries.

i. Identify key criteria to guide / inform the selection of suitable sites for strategic distribution use at the LPA level.

The recommended option will need to be considered through the Duty to Co-operate framework within (and if necessary beyond) Leicester and Leicestershire, including via the Leicester and Leicestershire Members Advisory Group (MAG).

APPENDIX 2

Freight Flow Forecasts Data Tables

Road Freight Forecasts to 2031

Destination	000s tonnes lifted 2012	2031	Growth 2012-2031	% growth 2012-2031	CAGR
East Midlands	**74,286**	**98,847**	**24,561**	**33%**	**1.5%**
of which:					
Leicestershire	***18,171***	***23,223***	***5,052***	***28%***	***1.3%***
West Midlands	72,432	78,886	6,454	9%	0.5%
Total East and West Midlands	*146,718*	*177,733*	*31,015*	*21%*	1.0%
Total Great Britain	*667,862*	*783,022*	*115,160*	*17%*	0.8%

Origin	000s tonnes lifted 2012	2031	Growth 2012-2031	% growth 2012-2031	CAGR
East Midlands	**80,066**	**107,099**	**27,033**	**34%**	**1.5%**
of which:					
Leicestershire	***21,031***	***27,847***	***6,816***	***32%***	***1.5%***
West Midlands	70,177	76,640	6,463	9%	0.5%
Total East and West Midlands	*150,243*	*183,739*	*33,496*	*22%*	1.1%
Total Great Britain	*667,862*	*783,022*	*115,160*	*17%*	0.8%

Rail Freight Forecasts to 2031

Destination	000s tonnes lifted 2012	2031	Growth 2012-2031	% growth 2012-2031	CAGR
East Midlands	**1,097**	**9,483**	**8,386**	**764%**	**12.0%**
of which:					
Leicestershire	-	1,115			
West Midlands	2,491	8,825	6,334	254%	6.9%
Total East and West Midlands	3,588	18,308	14,720	410%	9.0%
Total Great Britain	*18,233*	*78,757*	*60,524*	*332%*	*8.0%*

Origin	000s tonnes lifted 2012	2031	Growth 2012-2031	% growth 2012-2031	CAGR
East Midlands	**1,214**	**9,068**	**7,854**	**647%**	**11.2%**
of which:					
Leicestershire	-	782			
West Midlands	2,412	8,041	5,629	233%	6.5%
Total East and West Midlands	3,626	17,109	13,483	372%	8.5%
Total Great Britain	*18,233*	*78,757*	*60,524*	*332%*	*8.0%*

Total Traffic to 2031

Destination	000s tonnes lifted 2012	2031	Growth 2012-2031	% growth 2012-2031	CAGR
East Midlands	**75,383**	**108,330**	**32,947**	**44%**	**1.9%**
of which:					
Leicestershire	***18,171***	***24,338***	***6,167***	***34%***	***1.5%***
West Midlands	74,923	87,711	12,788	17%	0.8%
Total East and West Midlands	150,306	196,041	45,735	30%	1.4%

Origin	000s tonnes lifted 2012	2036	Growth 2012-2036	% growth 2012-2036	CAGR
East Midlands	**81,280**	**116,167**	**34,887**	**43%**	**1.9%**
of which:					
Leicestershire	***21,031***	***28,629***	***7,598***	***36%***	***1.6%***
West Midlands	72,589	84,681	12,092	17%	0.8%
Total East and West Midlands	153,869	200,848	46,979	31%	1.4%

Road Freight Forecasts to 2026

Destination	000s tonnes lifted 2012	2026	Growth 2012-2026	% growth 2012-2026	CAGR
East Midlands	**74,286**	**92,384**	**18,098**	**24%**	**1.6%**
of which:					
Leicestershire	***18,171***	**21,894**	***3,723***	***20%***	***1.3%***
West Midlands	72,432	**77,188**	4,756	7%	0.5%
Total East and West Midlands	*146,718*	*169,571*	*22,853*	*16%*	1.0%
Total Great Britain	*667,862*	**752,717**	*84,855*	*13%*	0.9%

Origin	000s tonnes lifted 2012	2026	Growth 2012-2026	% growth 2012-2026	CAGR
East Midlands	**80,066**	**99,985**	**19,919**	**25%**	**1.6%**
of which:					
Leicestershire	***21,031***	**26,053**	***5,022***	***24%***	***1.5%***
West Midlands	70,177	**74,939**	4,762	7%	0.5%
Total East and West Midlands	*150,243*	*174,924*	*24,681*	*16%*	1.1%
Total Great Britain	*667,862*	*752,717*	*84,855*	*13%*	0.9%

Rail Freight Forecasts to 2026

Destination	000s tonnes lifted 2012	2026	Growth 2012-2026	% growth 2012-2026	CAGR
East Midlands	**1,097**	**7,276**	**6,179**	**563%**	**14.5%**
of which:					
Leicestershire	-	**822**			
West Midlands	2,491	**7,158**	4,667	187%	7.8%
Total East and West Midlands	3,588	14,434	10,846	302%	10.5%
Total Great Britain	*18,233*	**62,830**	*44,597*	*245%*	9.2%

Origin	000s tonnes lifted 2012	2026	Growth 2012-2026	% growth 2012-2026	CAGR
East Midlands	**1,214**	**7,001**	**5,787**	**477%**	**13.3%**
of which:					
Leicestershire	-	**576**			
West Midlands	2,412	**6,560**	4,148	172%	7.4%
Total East and West Midlands	3,626	13,561	9,935	274%	9.9%
Total Great Britain	*18,233*	**62,830**	*44,597*	*245%*	9.2%

Total Traffic to 2026

Destination	000s tonnes lifted 2012	2026	Growth 2012-2026	% growth 2012-2026	CAGR
East Midlands	**75,383**	**99,660**	**24,277**	**32%**	**2.0%**
of which:					
Leicestershire	***18,171***	***22,715***	***4,544***	***25%***	***1.6%***
West Midlands	74,923	84,346	9,423	13%	0.8%
Total East and West Midlands	150,306	184,005	33,699	22%	1.5%

Origin	000s tonnes lifted 2012	2026	Growth 2012-2026	% growth 2012-2026	CAGR
East Midlands	**81,280**	**106,986**	**25,706**	**32%**	**2.0%**
of which:					
Leicestershire	***21,031***	***26,630***	***5,599***	***27%***	***1.7%***
West Midlands	72,589	81,499	8,910	12%	0.8%
Total East and West Midlands	153,869	188,485	34,616	22%	1.5%

Road Freight Forecasts to 2021

Destination	000s tonnes lifted 2012	2021	Growth 2012-2021	% growth 2012-2021	CAGR
East Midlands	**74,286**	**85,920**	**11,634**	**16%**	**1.6%**
of which:					
Leicestershire	***18,171***	**20,564**	***2,393***	***13%***	**1.4%**
West Midlands	72,432	75,489	3,057	4%	0.5%
Total East and West Midlands	*146,718*	*161,409*	*14,691*	*10%*	*1.1%*
Total Great Britain	*667,862*	*722,411*	*54,549*	*8%*	*0.9%*

Origin	000s tonnes lifted 2012	2021	Growth 2012-2021	% growth 2012-2021	CAGR
East Midlands	**80,066**	**92,871**	**12,805**	**16%**	**1.7%**
of which:					
Leicestershire	***21,031***	**24,260**	***3,229***	***15%***	**1.6%**
West Midlands	70,177	73,238	3,061	4%	0.5%
Total East and West Midlands	*150,243*	*166,110*	*15,867*	*11%*	*1.1%*
Total Great Britain	*667,862*	*722,411*	*54,549*	*8%*	*0.9%*

Rail Freight Forecasts to 2021

Destination	000s tonnes lifted 2012	2021	Growth 2012-2021	% growth 2012-2021	CAGR
East Midlands	**1,097**	**5,069**	**3,972**	**362%**	**18.5%**
of which:					
Leicestershire	-	**528**			
West Midlands	2,491	5,491	3,000	120%	9.2%
Total East and West Midlands	3,588	10,561	6,973	194%	*12.7%*
Total Great Britain	*18,233*	**46,902**	*44,597*	*245%*	*14.7%*

Origin	000s tonnes lifted 2012	2021	Growth 2012-2021	% growth 2012-2021	CAGR
East Midlands	**1,214**	**4,934**	**3,720**	**306%**	**16.9%**
of which:					
Leicestershire	-	**370**			
West Midlands	2,412	5,078	2,666	111%	8.6%
Total East and West Midlands	3,626	10,013	6,387	176%	*11.9%*
Total Great Britain	*18,233*	*46,902*	*28,669*	*157%*	*11.1%*

Total Traffic to 2021

Destination	000s tonnes lifted 2012	2021	Growth 2012-2021	% growth 2012-2021	CAGR
East Midlands	**75,383**	**90,989**	**15,606**	**21%**	**2.1%**
of which:					
Leicestershire	***18,171***	***21,092***	***2,921***	***16%***	**1.7%**
West Midlands	74,923	80,980	6,057	8%	0.9%
Total East and West Midlands	150,306	171,970	21,664	14%	*1.5%*

Origin	000s tonnes lifted 2012	2021	Growth 2012-2021	% growth 2012-2021	CAGR
East Midlands	**81,280**	**97,805**	**16,525**	**20%**	**2.1%**
of which:					
Leicestershire	***21,031***	***24,630***	***3,599***	***17%***	**1.8%**
West Midlands	72,589	78,317	5,728	8%	0.8%
Total East and West Midlands	153,869	176,122	22,253	14%	*1.5%*

APPENDIX 3

Warehouse Demand and Land Use Forecasts: Data Tables

Table A3.1: Current and 2021 Forecast Traffic to Large Scale Distribution Centres

Existing Traffic Flows to East Midlands

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	74,287	33,429	45%
Rail	1,097	1,097	100%
Total	75,384	34,526	46%

Existing Traffic Flows to Leicestershire

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	18,171	8,177	45%
Rail	0	0	100%
Total	18,171	8,177	45%

Forecast Traffic Flows to East Midlands 2021

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	85,920	38,664	45%
Rail	5,069	5,069	100%
Total	90,989	43,733	48%

Forecast Traffic Flows to Leicestershire 2021

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	20,564	9,254	45%
Rail	528	528	100%
Total	21,092	9,782	46%

Table A3.2: Current and 2026 Forecast Traffic to Large Scale Distribution Centres

Existing Traffic Flows to East Midlands

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	74,287	33,429	45%
Rail	1,097	1,097	100%
Total	75,384	34,526	46%

Existing Traffic Flows to Leicestershire

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	18,171	8,177	45%
Rail	0	0	100%
Total	18,171	8,177	45%

Forecast Traffic Flows to East Midlands 2026

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	92,334	41,550	45%
Rail	7,276	7,276	100%
Total	99,610	48,826	49%

Forecast Traffic Flows to Leicestershire 2026

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	21,894	9,852	45%
Rail	822	822	100%
Total	22,716	10,674	47%

Table A3.2: Current and 2031 Forecast Traffic to Large Scale Distribution Centres

Existing Traffic Flows to East Midlands

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	74,287	33,429	45%
Rail	1,097	1,097	100%
Total	75,384	34,526	46%

Existing Traffic Flows to Leicestershire

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	18,171	8,177	45%
Rail	0	0	100%
Total	18,171	8,177	45%

Forecast Traffic Flows to East Midlands 2031

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	98,847	44,481	45%
Rail	9,483	9,483	100%
Total	108,330	53,964	50%

Forecast Traffic Flows to Leicestershire 2031

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	23,223	10,450	45%
Rail	1,115	1,115	100%
Total	24,338	11,565	48%

Table A3.4: Current and 2036 Forecast Traffic to Large Scale Distribution Centres

Existing Traffic Flows to East Midlands

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	74,287	33,429	45%
Rail	1,097	1,097	100%
Total	75,384	34,526	46%

Existing Traffic Flows to Leicestershire

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	18,171	8,177	45%
Rail	0	0	100%
Total	18,171	8,177	45%

Forecast Traffic Flows to East Midlands 2036

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	105,129	47,308	45%
Rail	13,021	13,021	100%
Total	118,150	60,329	51%

Forecast Traffic Flows to Leicestershire 2036

	000s tonnes lifted		
	Total	To distribution centre	% to distribution centre
Road	24,455	11,005	45%
Rail	1,652	1,652	100%
Total	26,107	12,657	48%

Table A3.5: Forecast Traffic Growth to 2021 and Additional Floor Space Required

East Midlands			**Leicestershire**		
Total traffic growth 2013-2026	9,207	000s tonnes	Total traffic growth 2013-2026	1,605	000s tonnes
Floor space required	501	000s sq m	Floor space required	87	000s sq m
Land Required	125	ha	Land Required	22	ha

Assumes:
0.8 tonnes per pallet
1.5 pallets per sq m of floor space
18 stock turns per annum
85% floor space utilisation
Land required - floor space is 40% of plot footprint

Table A3.6: Forecast Traffic Growth to 2026 and Additional Floor Space Required

East Midlands			**Leicestershire**		
Total traffic growth 2013-2026	14,300	000s tonnes	Total traffic growth 2013-2026	2,497	000s tonnes
Floor space required	779	000s sq m	Floor space required	136	000s sq m
Land Required	195	ha	Land Required	34	ha

Assumes:
0.8 tonnes per pallet
1.5 pallets per sq m of floor space
18 stock turns per annum
85% floor space utilisation
Land required - floor space is 40% of plot footprint

Table A3.7: Forecast Traffic Growth to 2031 and Additional Floor Space Required

East Midlands			**Leicestershire**		
Total traffic growth 2013-2031	19,438	000s tonnes	Total traffic growth 2013-2031	3,388	000s tonnes
Floor space required	1,059	000s sq m	Floor space required	185	000s sq m
Land Required	265	ha	Land Required	46	ha

Assumes:
0.8 tonnes per pallet
1.5 pallets per sq m of floor space
18 stock turns per annum
85% floor space utilisation
Land required - floor space is 40% of plot footprint

Table A3.8: Forecast Traffic Growth to 2036 and Additional Floor Space Required

East Midlands			**Leicestershire**		
Total traffic growth 2013-2036	25,803	000s tonnes	Total traffic growth 2013-2036	4,480	000s tonnes
Floor space required	1,405	000s sq m	Floor space required	244	000s sq m
Land Required	351	ha	Land Required	61	ha

Assumes:

0.8 tonnes per pallet

1.5 pallets per sq m of floor space

18 stock turns per annum

85% floor space utilisation

Land required - floor space is 40% of plot footprint

APPENDIX 4

Assessment of Sub-regional Areas

Table: Assessment of Sub-regional Market Areas as Competitive Logistics Locations

Market Area	Highway Connectivity	Railway Connectivity	Location Relative to Markets	Availability of Labour	Key Areas of Opportunity
Leicestershire					
1. Hinckley and Bosworth	South-eastern part of market area offers direct access to M69 and A5. North-eastern part of market area offers direct access to M1. Connectivity would be enhanced were it to be possible to provide improved direct access to the M69.	Good. South-eastern and southern part of the market area served by the Leicester-Nuneaton line – recently cleared to W10 loading gauge, provides direct routes to deep-sea ports, other key regions and Channel Tunnel. Capacity upgrade Syston-Leicester-Nuneaton planned for 2014-19.	Good. Central location in the 'golden triangle'.	Good. Close to main population centres of Leicester, Nuneaton and Coventry.	South-eastern and southern part of market area where Leicester-Nuneaton railway line passes close to the M69/A5/M1 (including potentially improved connectivity to the strategic road network).
2. Blaby	Good. Northern part of the market area offers direct access to M1 and M69. Connectivity for the central part of market area would be enhanced were it to be possible to provide improved direct access to M1 and M69.	Good. Central part of the market area (on east-west axis) served by the Leicester-Nuneaton line – recently cleared to W10 loading gauge, provides direct routes to deep-sea ports, other key regions and Channel Tunnel. Capacity upgrade Syston-Leicester-Nuneaton planned for 2014-19.	Good. Central location in the 'golden triangle'.	Good. Close to main population centres of Leicester, Nuneaton and Coventry.	Central part of market area (on east-west axis) where Leicester-Nuneaton railway line passes close to the M69/A5/M1 (including potentially improved connectivity to the strategic road network).

Market Area	Highway Connectivity	Railway Connectivity	Location Relative to Markets	Availability of Labour	Key Areas of Opportunity
3. Oadby and Wigston	Poor. No direct access to the strategic highway/motorway network. Access to M1/M69 is via A6 and Leicester ring-road A563.	Good. Southern/western part of the market area served by the Midland Main Line – planned loading gauge enhancement as part of electric spine, provides direct routes to deep-sea ports, other key regions and Channel Tunnel. recently cleared to W10 loading gauge, provides direct routes to deep-sea ports, other key regions and Channel Tunnel. Capacity upgrade Syston-Leicester-Nuneaton planned for 2014-19.	Good. Central location in the 'golden triangle'.	Good. Close to main population centre of Leicester.	None. There are no suitable areas offering both good quality highway and railway connectivity.
4. Harborough	Good. Western part of the market area offers direct access to M1, M6, A14 and A5. Enhanced direct accessibility to the M1 and M69 would improve the connectivity of the north western part of the market area.	Good. Central part of the market area (on north-south) axis) served by the Midland Main Line – planned loading gauge enhancement as part of electric spine, provides direct routes to deep-sea ports, other key regions and Channel Tunnel. Capacity upgrade Syston-Leicester-Nuneaton planned for 2014-19.	Good. Central location in the 'golden triangle'.	Good. Close to main population centre of Leicester.	Rail-served - none. There are no suitable areas offering both good quality highway and railway connectivity. Road only - western and north-western parts of the market area with direct access to M1, M6, A14 and A5 (including potentially improved connectivity to the strategic road network).

Market Area	Highway Connectivity	Railway Connectivity	Location Relative to Markets	Availability of Labour	Key Areas of Opportunity
5. Leicester	Good. North-western part of the market area offers direct access to A46. Western part of the market area offers direct access to M1 (albeit that junctions are in Blaby and Hinckley/Bosworth market areas).	Good. Midland Main Line passes through centre of market area on a north-south axis – planned loading gauge enhancement as part of electric spine, provides direct routes to deep-sea ports, other key regions and Channel Tunnel. Capacity upgrade Syston-Leicester-Nuneaton planned for 2014-19.	Good. Central location in the 'golden triangle'.	Good. Population centre of Leicester.	None. Unlikely to be suitable areas offering both good quality highway and railway connectivity.
6. Melton	Poor. No direct access to the strategic highway/motorway network. Access to M1/A46 is via the A607	Good. Central part of the market area served by the Peterborough-Leicester line – recently cleared to W10, provides direct routes to deep-sea ports, other key regions and Channel Tunnel.	Poor. Rural location to the east of the 'golden triangle'.	Poor. Rural location away from major centres of population.	None.

Market Area	Highway Connectivity	Railway Connectivity	Location Relative to Markets	Availability of Labour	Key Areas of Opportunity
7. Charnwood	Good. Western part of the market area offers direct access to M1. Southern part of market area offers direct access to the A46 (and connections to M1). A6 passes through centre of market area on north-south axis – connections to M1 and A46.	Good. Central part of the market area served by the Midland Main Line (on north-south axis) – planned loading gauge enhancement as part of electric spine, provides direct routes to deep-sea ports, other key regions and Channel Tunnel. Capacity upgrade Syston-Leicester-Nuneaton planned for 2014-19. Eastern part of the market area served by the Peterborough-Leicester line – recently cleared to W10, provides direct routes to deep-sea ports, other key regions and Channel Tunnel.	Good. Central location in the 'golden triangle'.	Good. Close to main population centres of Leicester, Loughborough and Nottingham.	Central part of the market area (on north-south axis) where the Midland Main Line passes alongside the A6 and A46. Eastern part of the market area where the Peterborough-Leicester line passes alongside the A46. Road only - western part of the market area with direct access to M1

Market Area	Highway Connectivity	Railway Connectivity	Location Relative to Markets	Availability of Labour	Key Areas of Opportunity
8. North West Leicestershire	Good. Eastern part of the market area offers direct access to M1 Western part of market area offers direct access to the M42/A42. Northern part of the market area offers direct access to the A50.	Good. Northern part of the market area served by the freight only line connecting the Midland Main Line (at Trent Junctions) to the Derby-Birmingham line (Stenson Junction). Recently cleared to W10 loading gauge, provides direct routes to deep-sea ports, other key regions and Channel Tunnel.	Good. Central location in the 'golden triangle'.	Good. Close to main population centres of Leicester, Loughborough and Nottingham.	Northern part of market area where M1, A42, A50 passes close to the freight only line connecting the Midland Main Line (at Trent Junctions) to the Derby-Birmingham line. Road only - western part of the market area along the A42 corridor.
Rest of East Midlands					
9. SW Northants	Good. Direct access to the M1, which passes through the centre of the market area on a broad north-south axis. Southern part of the market area also served by the A43.	Good. Market area served by the West Coast Main Line (including Northampton Loop), which passes through the centre of the market area (broad north-south axis) – W10 loading gauge, provides direct routes to deep-sea ports, other key regions and Channel Tunnel.	Good. Central location in the 'golden triangle'.	Good. Close to main population centre of Northampton.	Broad north-south axis through the centre of the market area where the West Coast Main Line passes close to the M1 and A43.

Market Area	Highway Connectivity	Railway Connectivity	Location Relative to Markets	Availability of Labour	Key Areas of Opportunity
10. NE Northants	Good. Direct access to the A14, which passes through the centre of the market area on a broad east-west axis.	Good. Central part of the market area served by the Midland Main Line (on north-south axis) – planned loading gauge enhancement as part of electric spine, provides direct routes to deep-sea ports, other key regions and Channel Tunnel. Capacity upgrade Syston-Leicester-Nuneaton planned for 2014-19.	Good. Central location in the 'golden triangle'.	Good. Close to main population centres of Northampton, Corby, Wellingborough and Kettering.	Broad east-west axis through the centre of the market area where the Midland Main Line passes close to the A14.
11. S Derbyshire	Good. A50 passes through the centre of the market area on a broad east-west axis. A38 passes through the centre of the market area on a broad north-south axis.	Good Southern part of the market area served by the freight only line connecting the Midland Main Line (at Trent Junctions) to the Derby-Birmingham line (Stenson Junction) and by the Derby-Birmingham line. Recently cleared to W10 loading gauge, provides direct routes to deep-sea ports, other key regions and Channel Tunnel.	Good. Central location in the 'golden triangle'.	Good. Close to main population centres of Derby and Nottingham.	Broad east-west axis through the southern part of the market area where the freight only line connecting the Midland Main Line to the Derby-Birmingham line (and by the Derby-Birmingham line passes close to the A50 and A38.

Market Area	Highway Connectivity	Railway Connectivity	Location Relative to Markets	Availability of Labour	Key Areas of Opportunity
12. Amber Valley and West Notts	Good. Western part of the market area served by the M1 on a broad north-south axis. A38 passes through the centre of the market area on a broad north-south axis.	Good The market area served by the Midland Main Line (Erewash Valley line), which passes along the eastern edge of the market area on a north-south axis. Recently cleared to W10 loading gauge, provides direct routes to deep-sea ports, other key regions and Channel Tunnel.	Moderate. Location marginally to the north of the 'golden triangle'.	Good. Close to main population centres of Derby and Nottingham.	Broad north-south axis along the eastern edge of the market area where the Midland Main Line (Erewash valley Line) passes close to the M1 and A38.
13. Central and S Notts	Good. Eastern part of the market area served by the M1 on a broad north-south axis.	Moderate-Poor. Located on the Nottingham to Grantham/Newark railway lines – reduced loading gauge.	Good. Central location in the 'golden triangle'.	Good. Close to main population centres of Derby and Nottingham.	None
14. High Peak and Dales	Poor. No direct access to the strategic highway/motorway network.	Poor.	Poor. Rural location to the north of the 'golden triangle'.	Poor. No major centres of population.	None

Market Area	Highway Connectivity	Railway Connectivity	Location Relative to Markets	Availability of Labour	Key Areas of Opportunity
15. N Derbyshire	Good. Market area served by the M1, which passes through the centre of the market area on a broad north-south axis.	Good The market area served by the Midland Main Line, which passes through on a broad north-south axis. Recently cleared to W10 loading gauge, provides direct routes to deep-sea ports, other key regions and Channel Tunnel.	Poor. Located to the north of the 'golden triangle'.	Good. Close to main population centres of Derby, Chesterfield and Mansfield.	None. Located to the north of the 'golden triangle'.
16. N Notts	Good. Northern and north-western parts of market area served offer direct access to the A1.	Good. Eastern and central parts of the market area served by the East Coast Main Line – W9 loading gauge, provides direct routes to deep-sea ports, other key regions and Channel Tunnel	Poor. Located to the north of the 'golden triangle'.	Poor. No major centres of population.	None.
17. Lincs	Poor. No direct access to the strategic highway/motorway network.	Poor.	Poor. Rural location to the east of the 'golden triangle'.	Poor. No major centres of population.	None