[redacted]

From: Karin Hartley [redacted]
Sent: 26 October 2023 15:53
To: planningpolicy
Cc: David Green
Subject: 2nd Publication Stage of the AADM DPD - Representations by Delta Planning obo Tritax
Attachments: 231026_Representation Form_Tritax.pdf; Site Supporting Statement_Oct 2023.pdf; 221129_Newark_Appeal Decision.pdf; 230317_Newark Phase 1 RM_DN.pdf; JLL - Logistics Need and Market Demand Statement.pdf; BPF - Levelling up - The logic of logistics 2022.pdf; DfT Future of Freight Plan June 2022.pdf

Dear Sir/Madam,
Please find attached our submission to the 2nd Publication Stage of the AADMDPD. This submission will replace the representations we submitted to the first Publication Draft Plan in January 2023.
The following documents are included with this submission:

1. Completed representation form

Supporting evidence base as follows:

2. Site Promotional Document for Land East of Newlink Business Park, Newark
3. Outline planning permission for Phase 1 at Land East of Newlink Business Park
4. Reserved Matters approval for Phase 1 at Land East of Newlink Business Park
5. JLL Logistics Need and Market Demand Statement
6. DfT 'The Future of Freight' 2022
7. BPF 'The Logic of Logistics' 2022

I trust this is all in order.
Could you please confirm receipt of this email and attachments.
Kind regards,

Karin Hartley
Senior Associate
Delta Planning
[redacted]

RTPI AWARDS FOR PLANNING EXCELLENCE 2023 WINNER

DeltaPlanning

Cornwall Buildings, 45 Newhall Street, Birmingham, B3 3QR | [redacted] | www.deltaplanning.co.uk

REF (For Office Use Only):

Development Plan Document (DPD)
Second Publication Stage Representation Form

Second Publication Amended Allocations & Development Management Development Plan Document (DPD)

The District Council have produced a guidance note to assist in the completion of this form. Copies have been provided in correspondence and additional copies are available at: Castle House, Libraries in the District and https://www.newark-sherwooddc.gov.uk/aadm-representation/

Newark and Sherwood District Council is seeking your comments on the Second Publication Amended Allocations & Development Management DPD ('Second Publication AADMDPD'). Comments received at this stage should be about whether the Plan is legally compliant, sound and whether it has met the duty to cooperate. All representations must be received by the Council by 5pm on Monday 6th November 2023.

This form has two parts- Part A- Personal / Agent Details and Part B- Your Representation(s) and further notification requests. (Please fill in a separate sheet (Part B) for each aspect or part of the Local Plan you wish to make representation on). Documents to support your representations (optional) should be referenced.

Privacy Notice

Apart from your comments below, the personal information you have provided will only be used by Newark & Sherwood District Council in accordance with the UK General Data Protection Regulation and the Data Protection Act 2018 and will not be shared with any third party.

The basis under which the Council uses personal data for this purpose is to undertake a public task.

The information that you have provided will be kept in accordance with the Council's retention schedule, which can be found at: https://www.newark-sherwooddc.gov.uk/dataprotection/

Please note the Council cannot accept anonymous responses. All representations received will be made available for public inspection and therefore cannot be treated as confidential. They will also be:

Published in the public domain;
Published on the Council's website;
Shared with other organisations for the purpose of developing/adopting the Publication AADMDPD and forwarded to the Secretary of State for consideration;
Made available to the Planning Inspector appointed by the Secretary of State to examine the Publication AADMDPD; and
Used by the Inspector to contact you regarding the Examination of the Plan.

When making representations available on the Council's website, the Council will remove all telephone numbers, email addresses and signatures.

By submitting your Response Form/representation, you agree to your personal details being processed in accordance with these Data Protection Terms.

If you previously made a representation to the first Publication Allocations & Development Management DPD (November 2022) Regulation 19 stage, we would like to know how you want this to be treated. All representations made at that stage will be forwarded on to the Inspector unless you wish to supersede it with a new representation to this Second Publication Allocations & Development Management. Please make this clear at the beginning of your Representation. If your previous representation is no longer required because of the proposed changes made to this Second Publication AADMDPD, please let us know that you are happy for your previous representation to be withdrawn.

PART A- Personal / Agent Details

In circumstances where individuals/groups share a similar view, it would be helpful to the Inspector to make a single representation, stating how many people the submission is representing and how the representation was authorised.

	1. Personal Details	2. Agents Details
If an agent is appointed, please complete only the Title, Name and Organisation boxes below but complete the full contact details of the agent in column two.		
Title		Mr
First Name	n/a	David
Last Name	n/a	Green
Job Title (where relevant)		Director
Organisation (where relevant)	Tritax Acquisition 39 Limited	Delta Planning
Address Line 1		Cornwall Buildings
Line 2		45 Newhall Street
Line 3		Birmingham
Line 4		
Post Code		B3 3QR
Telephone Number		[redacted]
Email Address		[redacted]

Name or Organisation:	Delta Planning obo Tritax Acquisition 39 Limited

PART B- Representation(s)

3. To which part of the DPD does this Representation relate?

Part of the Second Publication AADMDPD:	Mark if Relevant (X)	Specify number/part/document:
Second Amended AADMDPD Paragraph Number	X	Paragraph Number: 1.28
Second Amended AADMDPD Policy Number	X	Policy Number: Part 2 Newark Employment Allocations
Second Amended AADMDPD Policies Map Amendments	X	Part of Policy Map: Newark Policy Map
Integrated Impact Assessment[1]		Paragraph Number:
Habitat Regulations Assessment		Paragraph Number:
Statement of Consultation		Paragraph Number:
Supporting Evidence Base	X	Document Name: Employment Land Evidence Page/Paragraph:

4. Do you consider the DPD to be LEGALLY COMPLIANT?

Yes ☒ No ☐

5 Do you consider the DPD to comply with the Duty-to-Cooperate?

Yes ☒ No ☐

6. Do you consider the DPD to be SOUND?

Yes ☐ No ☒

*The considerations in relation to the Legal Compliance, Duty to Cooperate and the DPD being 'Sound' are explained in the Newark & Sherwood Development Plan Document Representation Guidance Notes and in Paragraph 35 of National Planning Policy Framework (NPPF) (2023).

[1] The Integrated Impact Assessment (IIA) integrates Sustainability Appraisal (SA), Strategic Environmental Assessment (SEA), Equalities Impact Assessment (EqIA) and Health Impact Assessment (HIA). Sustainability Appraisals (SA) are a requirement of the Planning and Compulsory Purchase Act 2004 and Strategic Environmental Assessments (SEA) are required by European Directive EC/2001/42, which was transposed into UK law by the Environmental Assessment Regulations for Plans and Programmes (July 2004). The EqIA is a way of demonstrating the District Council is fulfilling the requirements of the Public Sector Equality Duty contained in section 149 of the Equality Act 2010. HIA is a recognised process for considering the health impacts of plans and undertaking this type of assessment is widely seen as best practice.

7. The DPD is not sound because it is <u>not:</u>

(1) Positively Prepared ☒
(2) Justified ☒
(3) Effective ☒
(4) Consistent with national policy ☒

8. Please provide precise details of why you believe the DPD is, or is not, legally compliant, sound or in compliance with the duty to cooperate in the box below.

If you wish to provide supplementary information to support your details, please ensure they are clearly referenced.

Our objections and concern relate to the employment land provision and allocations for Newark, and the omission of Land East of Newlink Business Park from the site allocations.

Our comments below are supported by the following evidence lodged with these representations:

1. Site Promotional Document for Land East of Newlink Business Park, Newark
2. Outline planning permission and Reserved Matters approval relating to Phase 1 development at Land East of Newlink Business Park
3. JLL Logistics Need and Market Demand Statement
4. DfT 'The Future of Freight' 2022
5. BPF 'The Logic of Logistics' 2022

Paragraph 1.2 of the AADMDPD states that the intention of the Plan Review is to ensure that the DPD continues to allocate sufficient land for housing, employment and retail to meet the needs of Newark and Sherwood District to 2033. Paragraph 1.28 notes that the AADMDPD sets out the detail for how employment land will be provided across the District in line with Spatial Policy 2 of the Amended Core Strategy which identified a requirement of 83.1 ha for the period 2013 to 2033. Paragraph 1.28 then suggests that the District has a supply of 185.56ha of employment land (of which 133.08ha is stated to be in Newark) and as such no additional employment allocations are included within the Plan, which is confirmed at Paragraph 1.32.

The above position is not sound. Our case is based around the following key points:

1. The existing employment land supply does not adequately cater for the requirements of the Big Box logistics market, and the Amended Core Strategy requirement figure is clearly stated as a minimum. The Strategy specifically provides for new allocations to be identified through Spatial Policy 9, where justified. The updated AADMDPD is the opportunity to do just that with regard to meeting the needs for logistics.
2. The evidence base has moved on considerably since the Amended Core Strategy was prepared and examined. There is now a clearly evidenced significant need and demand for additional strategic logistics sites in Nottinghamshire and that evidence base encourages additional provision in Newark which it notes is well placed to meet some of the requirement for new strategic sites. The DPD is therefore not correctly justified or effective in meeting needs.
3. A further Core Strategy Review has not commenced, and it could therefore be some years before a new strategic policy is in place. In the meantime, Newark will fail to meet and capitalise on the identified need and demand for strategic logistics in this area. As a result, the DPD is not being positively prepared and will not comply with the NPPF. The overall case and economic benefits of the Logistics Sector are set out in recent studies by the BPF and the DfT.

4. Land East of Newlink Business Park (SHELAA Ref. 16_0174) is ideally placed to meet the additional need for logistics sites, and already has Reserved Matters approval for a first phase. The remainder of the site should therefore be brought forward through the AADMDPD.

We further detail each of these points in turn below.

Employment Land Requirements and Core Strategy Spatial Policy 9

Spatial Policy 2 of the Amended Core Strategy (adopted in 2019) sets an employment land requirement of 83.1ha and specially states that this is a minimum. The word 'minimum' was introduced late in the preparation of the document as a Main Modification following the examination of the Amended Core Strategy.

The Inspector did not take issue with the suggested employment land target at the time as it was considered justified by the evidence and in particular the 2015 Employment Land Forecasting Study for Nottingham Core & Outer Housing Market Areas. However, he considered it essential to express the employment land target as a minimum, noting that setting a limit would be contrary to national policy as it would not have provided a sufficiently flexible policy to enable investment and economic growth over the plan period.

Whilst the employment land policies were found sound through the Amended Core Strategy, we do not agree that this provides sufficient justification to discount allocating any new sites for employment development. The employment land target in the Amended Core Strategy is set as a minimum in order to provide flexibility to enable the Council to respond to changing circumstances. It is therefore disappointing to note that the opportunity has not been taken to review the site allocations in light of the now very clear updated evidence base that demonstrates there is a significant need and demand for additional strategic logistics sites within the District which far outstrips the current supply including the allocated sites. This is explained further below.

It is also important to note that Amended Core Strategy Spatial Policy 9 acknowledges that from time to time the Council will need to allocate additional sites to meet the development needs of the District. The policy sets out 10 guiding principles which will be used to make such allocations. All of these criteria are satisfied by the land East of Newlink Business Park as demonstrated through the Site Supporting Statement submitted alongside these representations.

Significant need and demand for strategic logistics sites

The employment land target of 83.1ha in the Amended Core Strategy is based on evidence that dates as far back as 2015 and does not recognise the specific needs of the logistics sector. The economic landscape, particularly in respect of logistics, has changed significantly since the evidence that informed the Core Strategy was prepared and it no longer provides a robust basis to guide economic development and the use of land in the district.

A detailed review of the latest evidence on need and demand for strategic logistics is provided by the Logistics Need and Market Demand Statement prepared by JLL and submitted with these representations. Key points are summarised below.

The evidence with regard to employment land has recently been updated with the publication of the Nottingham Core HMA and Nottingham Outer HMA Employment Land Needs Study (Lichfields, May 2021) and, more importantly, the Nottingham Core and Outer HMA Logistics Study (Iceni, August 2022) which specifically looks at the need for strategic logistics land. Neither of these two documents is listed at Paragraph 1.14 of the AADMDPD as part of the evidence that has informed the preparation of the DPD. This itself is an error that should be corrected. The Iceni Logistics Study is also missing from the list of evidence base documents that have been made available on the Council's website.

The Iceni Logistics Study has concluded that there is a need of 1,486,000 sq.m. of B8 floor space for the study area (i.e. the county of Nottinghamshire). The study has identified a maximum supply of 885,000 sq.m., resulting in a residual need of at least 600,000 sq.m. Newark is specifically identified as one of five Areas of Opportunity within the Logistics Study where new strategic logistics sites should be located. This is based on its historic suitability as a successful logistics location (as demonstrated through the past delivery of large units at Newlink Business Park), the suitability of the A1 route as an artery for strategic logistics providers and the proximity of a suitable local labour market.

It should be noted that the overall employment land supply figure quoted in the AADMDPD includes 3 logistics sites in Newark as follows: Land south of Newark (50ha), Land west of Stephenson Way (6.85ha) and Land of Brunel Drive (also referred to as Land off Beacon Hill Road, G Park) (15.61ha). None of the other supply is deemed by the Logistics Study as being potentially suitable for Big Box distribution. This is probably due to the size of the plots, their proposed use (e.g. NAP2C – allocated for just B1), their setting (i.e. as part of a mixed development – e.g. NUA/MU/1) or a combination of these elements. The three logistics sites are not however considered sufficient to meet market needs.

Despite these recent studies, which should form part of the Council's evidence base to the AADMDPD, no new allocations are proposed. The AADMDPD continues to rely on existing sites. As acknowledged by the Logistics Study, Newark already lacks a suitable scale and range of sites to meet this demand.

The evidence base not only supports the need for Development Plans to allocate additional logistics sites, but also provides criteria for the identification and selection of suitable sites. These criteria include scale (a minimum of 25ha), direct access to the motorway and strategic road network, and locations away from built settlements. It also prioritises extensions to existing industrial/distribution sites.

Land East of Newlink Business Park meets all the criteria set by the Logistics Study. Its principal attributes include: -

- Scale – at 47ha gross it easily exceeds the threshold set (i.e. 25ha);
- Access – direct access to the A17, close to the junction of the A1, A17 and A46;
- Amenity – a location away from built settlement;
- Location – the site acts as a natural extension to Newlink Business Park, an established logistics location and sequentially, it is a preferred location to other less well-located sites.

Given the above there is clear justification for allocating additional land, and specifically allocating land East of Newlink Business Park.

Loss of opportunity/non-compliance with national policy

Given a Core Strategy Review has not yet commenced it will be some years before new strategic policies are in place in Newark. Indeed, as noted at Paragraph 1.32 of the AADMDPD, the Council is unlikely to commence a full review of the Local Plan until 2024.

In light of the strong evidence for additional strategic logistics sites, we consider that the Council should not await the outcome of the Core Strategy Review, but act now to ensure that Newark can satisfy and capitalise on the opportunities presented by the strong logistics market and its status as a key area of opportunity for strategic logistics development.

Evidence (confirming many of the points in favour of the proposed allocation in this case) is contained in a very recent report commissioned by the British Property Federation (BPF) and other industry stakeholders including Tritax on the role of logistics in the Government's 'Levelling Up' policy agenda (copy provided with this submission). This is a very important piece of research which looks in detail at the critical value of

logistics to the UK economy, its speed of growth and the quality and quantity of jobs it delivers. This also links to how the sector can play a significant role in the Government's 'Levelling Up' policies. It includes a broad commentary on the failure of the planning system to allocate sufficient land for logistics as a result of development plans being prepared against the backdrop of an inadequate evidence base, as is precisely the case with this DPD at present.

Section 6 of the NPPF (2023) notes at Paragraph 81 that planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. It further requires that significant weight should be placed on the need to support economic growth and productivity, considering both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. Paragraph 83 further states that planning policies and decisions should recognise and address the specific locational requirements of different sectors, and that this includes making provision for storage and distribution operations. As currently drafted, we consider the AADMDPD does not comply with the NPPF.

Allocation of Land East of Newlink Business Park

As identified above, Land East of Newlink Business Park should be allocated to meet these identified needs. It satisfies all the site selection criteria of Core Strategy Spatial Policy 9 as well as the locational and site selection criteria in the Iceni Logistics Study. This is expanded upon in the Site Supporting Statement submitted alongside these representations and under Question 9 below.

(Continue on a separate sheet/expand box if necessary)

9. Please set out what change(s) you consider necessary to make the DPD legally compliant or sound, having regard to the test you have identified at 6 above where this relates to soundness. You will need to say why this change will make the DPD legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

As identified through our answer to Question 8, we submit that the AADMDPD should be amended to include the site East of Newlink Business Park (SHELAA Site Ref. 16_0174) as an additional employment site allocation.

A Site Supporting Statement has been prepared and submitted with these representations which demonstrates the development potential of this site. It is important to note that the first phase of development amounting to 16.6ha (circa 37,000 sq.m.) has already received Reserved Matters approval. The principle and suitability of logistics use in this location has therefore already been established.

The site's suitability is also fully acknowledged in the latest SHELAA (Site Ref. 16_0174) with the Site Assessment Report reaching the overall conclusion in respect of this site that *"The site is adjacent the urban boundary of Newark and may be considered suitable for development."*

Newark has missed out previously on the growth of the logistics sector as it had no suitable and deliverable logistics sites to offer to the market. The allocation of this land for employment will increase the supply of sites of a sufficient size to accommodate strategic logistics/industrial occupiers in the District satisfying both immediate demands (through the delivery of the Phase 1 proposal) and supplementing the longer-term supply of sites.

(Continue on a separate sheet/expand box if necessary)

Please note your Representation should cover succinctly all the information, evidence and supporting Information necessary to support/justify the Representation and the suggested change, as there will not normally be a subsequent opportunity to make further Representations based on the original Representations at the Publication stage. **After this stage, further submissions will be only at the request of the Inspector, based on the matters and issues he/she identifies for Examination.**

10. If your Representation is seeking a change, do you consider it necessary to participate at the oral part of the examination?

No, I do not wish to participate at the oral Examination.	**Yes**, I wish to participate at the oral Examination.
☐	☒

11. If you wish to participate at the oral part of the Examination, please outline why you consider this to be necessary.

To provide and expand our detailed evidence on the need and demand for additional employment land and the suitability of Land East of Newlink Business Park as an additional employment land allocation.

(Continue on a separate sheet/expand box if necessary)

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the Examination.

12. Please tick the relevant boxes below to receive notifications (via email) on the following events:

DPD submitted to the Secretary of State for Inspection ☒

Examination in Public hearing sessions ☒

Planning Inspector's recommendations for the DPD have been published. ☒

DPD has been formally adopted. ☒

Signature: [redacted] **Date:** 26/10/2023

Please return this form by 5pm on 6th November 2023 to one of the addresses below:

Email: planningpolicy@newark-sherwooddc.gov.uk

Post: **Planning Policy & Infrastructure Business Unit**
Newark & Sherwood District Council
Castle House
Great North Road
Newark
NG24 1BY

Information is available at:
https://www.newark-sherwooddc.gov.uk/aadm-representation/

Office Use Only

Date of Receipt:

Representation No:

The Planning Inspectorate

Appeal Decision

Site visit made on 11 October 2022

by Mr W Johnson BA(Hons) DipTP DipUDR MRTPI

an Inspector appointed by the Secretary of State

Decision date: 29 NOVEMBER 2022

Appeal Ref: APP/B3030/W/22/3292692
Land east of Newlink Business Park, Newark, Nottinghamshire

The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
The appeal is made by Tritax Acquisition 39 Limited against the decision of Newark & Sherwood District Council.
The application Ref 20/01452/OUTM, dated 31 July 2020, was refused by notice dated 3 November 2021.
The development proposed is described as: 'development of site for distribution uses (Use Class B8) including ancillary offices and associated works including vehicular and pedestrian access, car parking and landscaping'.

Decision

1. The appeal is allowed and planning permission is granted for development of the site for distribution uses, including ancillary offices and associated works including vehicular and pedestrian access, car parking and landscaping at Land East of Newlink Business Park, Newark, Nottinghamshire, in accordance with the terms of the application, Ref 20/01452/OUTM, dated 31 July 2020 and the plans submitted with it, subject to the conditions in the attached schedule.

Preliminary Matters

2. For clarity and precision, I have taken the address in the banner heading from the application form appeal form, inserting 'Nottinghamshire' as it is included on the Council's decision notice. I have also taken the description in the banner heading above from the application form. However, in the Decision I have not referred to 'Use Class B8' due to the Town and Country Planning (Use Classes) (Amendment) (England) Regulations 2020 (the amended UCO) coming into force on 1 September 2020, amending the Town and Country Planning (Use Classes) Order 1987 (as amended) (the UCO). Consequently, the use classes listed in the GPDO, including B8 have now been superseded and incorporated within Class E (Commercial, Business and Service) of the amended UCO. In this instance, no party will be prejudiced through the implications of the amended UCO or the introduction of Class E.

3. Outline planning permission is sought, but with all matters reserved, except for access. I have determined the appeal on this basis.

Background and Main Issue

4. The Council's decision notice sets out one reason for refusal relating to the principle of development, through its location. Consequently, the Council has confirmed[1] it would not defend its reason for refusal due to the findings

[1] Letter received by email dated 8 July 2022

contained within a draft Nottinghamshire Core & Outer HMA Logistics Study, June 2022 (the draft study). Accordingly, the Council has not submitted evidence on this matter. Nonetheless, I have maintained this matter as a main issue due to the number of concerns raised by interested parties from the original planning application consultation and additional comments through the notification of this appeal.

5. Accordingly, I identify that the main issue on this appeal is, whether the site is an appropriate location for the proposed development, having particular regard to the effect of safeguarding the countryside.

Reasons

6. The site lies in Landscape Character Zone: ES PZ 4 Winthorpe Village Farmlands. The landscape condition here is defined as moderate and landscape sensitivity is also described as moderate. The policy zone has a landscape action of conserve and create. The appellant submitted a Landscape and Visual Assessment Impact Assessment[2] (LVIA) with the application to which I have had regard. I also viewed the site from the majority of locations identified in the LVIA and am satisfied that I saw everything I need to assess the impact of the development.

7. The proposed development comprises the erection of a commercial storage and distribution warehouse unit with ancillary offices. The site includes the A17 and the bridge linking land to the north and east to accommodate a proposed access and pedestrian infrastructure, including a new vehicle access from a new roundabout junction on the A17. An extension to the public footpath/cycleway network is also envisaged, with a pedestrian route potentially connecting the existing public right of way to the north of the site and the existing building to the west.

8. Spatial Policy 3 (Rural Areas) of the Amended Core Strategy 2019 (ACS) confirms that, development not in villages or settlements, in the open countryside, will be strictly controlled and restricted to uses which require a rural setting. ACS Core Policy 9 (Sustainable Design) requires a high standard of sustainable design that protects and enhances the natural environment and contributes to the distinctiveness of the locality and requires development that is appropriate in form and scale to the context.

9. ACS Policy 13 (Landscape Character) requires the landscape character of the surrounding area to be conserved and created. Policies DM5 (Design) of the Allocations and Development Management Development Plan Document, 2013 (ADM) requires the local distinctiveness of the District's landscape and character of built form to be reflected in the scale, form, mass, layout, design, materials and detailing of proposals for new development.

10. ADM Policy DM8 (Development in the Open Countryside) states that 'small scale employment development' will only be supported where it can demonstrate the need for a particular rural location and a contribution to providing or sustaining rural employment to meet local needs in accordance with the aims of Core Policy 6. Whilst the site is located outside of Newark Urban Area as defined in the development plan, the proposed development is not considered to comply with any of the exceptions listed. In addition,

[2] Landscape and Visual Impact Appraisal by Barry Chin Associates dated March 2020

Paragraph 174 of the National Planning Policy Framework (the Framework) requires planning decisions to recognise the intrinsic character and beauty of the countryside.

11. There is little doubt that the proposed development represents a departure from the development plan. Additionally, as the site is currently undeveloped, I accept that the harm from this proposed development to landscape character, visual amenity and potentially the loss of some best and most versatile agricultural land would be permanent. However, it is not known if the land on site would comprise either Grade 3a or 3b in the Agricultural Land Classification and thus could be of moderate quality.

12. For the reasons given above, I conclude that the proposed development would conflict with the strategic and character and appearance aims of ACS Spatial Policy 3, ACS Core Policies 9 and 13, ADM Policies DM5 and DM8. There would also be conflict with Framework, particularly paragraph 174.

Other Matters

13. I have had regard to a number of objections received from interested parties, including local residents and Coddington Parish Council, expressing a wide range of concerns including, but not limited to the following: highways safety; flooding; loss of trees, water table loss of potential public rights of way; wildlife; noise; effect on Coddington and potential future development, amongst other things. However, I note that these matters were considered where relevant by the Council when it determined the planning application. Whilst I can understand the concerns of the interested parties, there is no compelling evidence before me that would lead me to come to a different conclusion to the Council on these matters.

14. Whilst Section 72(1) of the Act sets out that in the exercise of planning functions that requires special attention to be paid to the desirability of preserving or enhancing the character or appearance of the area, this statutory duty does not extend to the setting of a conservation area. On the evidence before me, I agree with the Council's observations with regard to Coddington Conservation Area and Winthorpe Conservation Area, where there would be limited and no intervisibility respectively, resulting in overall neutral effects. In the absence of substantive evidence to the contrary, I find that the proposed development would conserve the heritage assets in a manner appropriate to their significance, in line with the Framework.

Planning Balance

15. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires this appeal to be determined in accordance with the development plan unless material considerations indicate otherwise.

16. Whilst ACS Spatial Policy 2 sets out the employment land requirements for the District and provides a strategy for distributing growth. It sets out a minimum employment land requirement of 83.1ha with 51.9ha of the total to be provided within the Newark Area, with the Employment Land Availability Study 2019 confirming that there is sufficient supply of employment land for the Newark area.

17. However, the findings within the draft study has identified a current supply of 800,000m^2 through existing permissions and allocations in the study area, but

with an overall need identified for 1,486,00m^2 to 2040 with some of this demand expected to be met in Newark along the A1 and A46 corridors. Consequently, the draft study confirms that there is a very significant shortfall of 686,000m^2 of land for large scale logistics development in the study area, which includes Newark and Sherwood. Whilst the draft study does not form part of the existing development plan and is still in draft form, it nonetheless forms a material consideration of very significant weight in the determination of this appeal.

18. The adverse impacts of the development would relate to character and appearance and potentially the loss of some best and most versatile agricultural land, both of which would create significant and moderate harm respectively. However, the significant harm to landscape character could be notably reduced through appropriate layout and landscaping, particular in the area of the site adjacent to the existing development, which is similar in scale and appearance to the proposed development. In any event, such considerations would be for a reserved matters stage and could be secured by means of a suitably worded condition.

19. Weighing against the above impacts, the scheme would provide much-needed large scale logistics development, which has been identified as being a resilient sector with particular demand in the e-commerce, automation and electric vehicles. All of which require large, modern facilities to cope with the flow of goods in the most efficient way. The draft study estimates that up to 9000 jobs could be generated across the study area through the delivery of schemes similar to the proposed development across the study area. This is something that the proposed development would contribute directly towards.

20. Sustainable development has three dimensions. The proposed development would involve a loss of greenfield land but in considering the environmental role, this is balanced against the very significant benefits to the economic and social roles through the construction of the proposed development, the support of a resilient business sector and the generation of a notable number of job opportunities, particularly available to those in the study area of the draft study.

21. In my view the benefits of the proposed development clearly outweigh the conflicts with the development plan. I conclude therefore that these are material considerations which mean that in this case the proposed development can be determined other than in accordance with the development plan. I therefore conclude that any adverse impacts of granting planning permission in this instance would not outweigh the benefits when assessed against the policies in the Framework taken as a whole. The proposed development is suitable for the site.

Conditions

22. I have considered what planning conditions would be appropriate, making amendments and minor corrections, where necessary, to ensure clarity and compliance with the tests contained within Paragraph 56 of the Framework and the Planning Practice Guidance. In addition to conditions relating to the time limit for implementation, for reasons of certainty a condition requiring the development to be undertaken in accordance with approved plans/documents is necessary. I have taken this list of plans from the evidence submitted by the appellant, as no such list is provided in the Officer Report and only 2no. plans

are listed on the Council's decision notice. Given the reference to various other plans in the list of suggested conditions, it is necessary to include them for the avoidance of doubt.

23. A pre-commencement condition relating to the submission of a Reserved Matters application is reasonable and necessary for the avoidance of doubt and to define the permission. Pre-commencement conditions for contamination; a Construction Environmental Management Plan; Construction Method Statement; Drainage; Arboriculture; Highways (new roads); Archaeology are all reasonable and necessary in the interest of the living conditions of neighbouring occupiers, highways safety and the environment.

24. Pre-occupation conditions are reasonable and necessary for the new roundabout; footway and cycle facilities; a travel plan; cycle Parking in the interest of highways matters and sustainable travel options as an alternative to a motor vehicle.

25. Other conditions have been included surrounding the maximum parameters set out in the parameter plan; a Biodiversity/Landscape Environmental Management Plan; lighting scheme; arboriculture works; landscaping scheme; transport and parking appraisal; archaeological works; public rights of way and sustainability features are all reasonable and necessary to ensure acceptable effects on ecology, character and appearance, highway safety, archaeology, access and the environment.

Conclusion

26. For the reasons given above, I conclude that the appeal should be allowed.

[redacted]

INSPECTOR

SCHEDULE OF CONDITIONS

Time Limit

1) Applications for approval of reserved matters shall be made to the Local Planning Authority not later than 1 year from the date of this permission. The development hereby permitted shall begin not later than two years from the date of approval of the last of the reserved matters to be approved.

Drawings

2) The development hereby permitted shall be carried out in accordance with the following plans and documents:

- Site Location Plan 16-233-SGP-XX-XX-DR-A-110001 Rev. A
- Existing Site Plan 16-233-SGP-XX-XX-DR-A-110002
- Parameters Plan 16-233-SGP-XX-XX-DR-A-111002 Rev. C
- Illustrative Site Layout Plan 16-233-SGP-XX-XX-DR-A-F018-001 Rev. E
- Illustrative Landscape Masterplan 2047/20-01 Rev. B
- Illustrative Landscape Sections 2047/20-02 Rev. A

Pre-Commencement

3) Details of the appearance, landscaping, layout and scale ('the reserved matters') shall be submitted to and approved in writing by the Local Planning Authority before development begins and the development shall be carried out as approved.

4) Development other than that required to be carried out as part of an approved scheme of remediation or for the purposes of archaeological or other site investigations linked to this planning permission must not commence until Parts A to D of this condition have been complied with. If unexpected contamination is found after development has begun, development must be halted on that part of the site affected by the unexpected contamination to the extent specified by the Local Planning Authority in writing until Part D has been complied with in relation to that contamination.

Part A: Site Characterisation

An investigation and risk assessment including an UXO assessment, in addition to any assessment provided with the planning application, must be completed in accordance with a scheme to assess the nature and extent of any contamination on the site, whether or not it originates on the site. The contents of the scheme are subject to the approval in writing of the Local Planning Authority. The investigation and risk assessment must be undertaken by competent persons and a written report of the findings must be produced. The written report is subject to the approval in writing of the Local Planning Authority. The report of the findings must include:

(i) a survey of the extent, scale and nature of contamination;

(ii) an assessment of the potential risks to:

- human health;
- property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes;
- adjoining land;
- ground waters and surface waters;
- ecological systems;
- archaeological sites and ancient monuments;

(iii) an appraisal of remedial options, and proposal of the preferred option(s).

This must be conducted in accordance with DEFRA and the Environment Agency's 'Model Procedures for the Management of Land Contamination, CLR 11'.

Part B: Submission of Remediation Scheme

A detailed remediation scheme to bring the site to a condition suitable for the intended use by removing unacceptable risks to human health, buildings and other property and the natural and historical environment must be prepared and is subject to the approval in writing of the Local Planning Authority. The scheme must include all works to be undertaken, proposed remediation objectives and remediation criteria, timetable of works and site management procedures. The scheme must ensure that the site will not qualify as contaminated land under Part

2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

Part C: Implementation of Approved Remediation Scheme

The approved remediation scheme must be carried out in accordance with its terms prior to the commencement of development other than that required to carry out remediation. The Local Planning Authority must be given two weeks written notification of commencement of the remediation scheme works.

Following completion of measures identified in the approved remediation scheme, a verification report (referred to in PPS23 as a validation report) that demonstrates the effectiveness of the remediation carried out must be produced and is subject to the approval in writing of the Local Planning Authority.

Part D: Reporting of Unexpected Contamination

In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken in accordance with the requirements of Part A, and where remediation is necessary a remediation scheme must be prepared in accordance with the requirements of Part B, which is subject to the approval in writing of the Local Planning Authority.

Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the Local Planning Authority in accordance with Part C.

5) No development shall be commenced until a Construction Environmental Management Plan (CEMP) incorporating a Reasonable Avoidance Measures Statement (RAMS) and timetable has been submitted to and approved in writing by the Local Planning Authority. The scheme shall identify appropriate measures for the safeguarding of protected and locally important species and their habitats and shall include:

a) an appropriate scale plan showing protection zones where construction activities are restricted and where protective measures will be installed or implemented;

b) details of protective measures (both physical measures and sensitive working practices) to avoid impact during construction. This shall include the precautionary measures listed by Nottinghamshire Wildlife Trust in their letter dated 18/09/2020) and the pre-construction survey work and / or mitigation measures as summarised in paragraphs 4.24 and 4.27 of the Ecological Appraisal (July 2020 by fpcr);

c) a timetable to show phasing of construction activities to avoid periods of the year when sensitive wildlife could be harmed (such as the bird nesting season);

d) details of a person responsible for the management of the protection zones. Development shall be carried out in accordance with the approved details and timetable.

6) No development shall commence on site (including any site clearance/preparation works), until a Construction Method Statement has been submitted to the Local Planning Authority for approval in writing. Details shall

provide the following, which shall be adhered to throughout the construction period:

a) Details of construction access

b) The parking of vehicles of site operatives and visitors

c) Loading and unloading of plant and materials

d) Storage of oils, fuels, chemicals, plant and materials used in constructing the development

e) The erection and maintenance of security hoarding, including any decorative displays and facilities for public viewing

f) Wheel-wash washing facilities and road-cleaning arrangements

g) Measures to control the emission of dust and dirt during construction

h) A scheme for recycling/disposing of waste resulting from site preparation and construction works

i) Measures for the protection of the natural environment

j) Hours of work on site, including deliveries and removal of materials

k) Full details of any piling technique to be employed, if relevant

l) Location of temporary buildings and associated generators, compounds, structures and enclosures, and

m) Routing of construction traffic

7) No part of the development hereby approved shall commence until a detailed surface water drainage scheme based on the principles set forward by the approved Link Engineering Flood Risk Assessment (FRA) ref. LE19105-NEW-LE-GEN-XX-RP-CE-FRA01 dated July 2020, has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be implemented in accordance with the approved details prior to occupation of the development.

The scheme to be submitted shall:

a) Demonstrate that the development will use SuDS throughout the site as a primary means of surface water management and that design is in accordance with CIRIA C753.

b) Limit the discharge rate generated by all rainfall events up to the 100 year plus 40% (for climate change) critical rain storm 5 l/s rates for the developable area.

c) Provision of surface water run-off attenuation storage in accordance with 'Science Report SCO30219 Rainfall Management for Developments' and the approved FRA

d) Provide detailed design (plans, network details and calculations) in support of any surface water drainage scheme, including details on any attenuation system, and the outfall arrangements. Calculations should demonstrate the performance of the designed system for a range of return periods and storm

durations inclusive of the 1 in 1 year, 1 in 2 year, 1 in 30 year, 1 in 100 year and 1 in 100 year plus climate change return periods.

e) For all exceedance to be contained within the site boundary without flooding new properties in a 100year+40% storm.

f) Details of STW approval for connections to existing network and any adoption of site drainage infrastructure.

g) Evidence of how the on-site surface water drainage systems shall be maintained and managed after completion and for the lifetime of the development to ensure long term.

8) No works or development shall take place until an arboricultural method statement and scheme for protection of the retained trees/hedgerows has been agreed in writing with the Local Planning Authority. This scheme shall include:

a) A plan showing details and positions of the ground protection areas.

b) Details and position of protection barriers.

c) Details and position of underground service/drainage runs/soakaways and working methods employed should these runs be within the designated root protection area of any retained tree/hedgerow on or adjacent to the application site.

d) Details of any special engineering required to accommodate the protection of retained trees/hedgerows (e.g. in connection with foundations, bridging, water features, hard surfacing).

e) Details of construction and working methods to be employed for the installation of drives and paths within the root protection areas of any retained tree/hedgerow on or adjacent to the application site.

f) Details of timing for the various phases of works or development in the context of the tree/hedgerow protection measures.

All works/development shall be carried out in full accordance with the approved arboricultural method statement and tree/hedgerow protection scheme.

9) No part of the development hereby permitted shall take place until details of the new roads have been submitted to and approved in writing by the Local Planning Authority including layout, street lighting, drainage and outfall proposals, and any proposed structural works. The development shall be implemented in accordance with these details.

10) No development shall take place until written schemes of archaeological investigation and mitigation have been submitted to and approved in writing by the Local Planning Authority. These schemes shall include the following:

a) An assessment of significance and proposed mitigation strategy (i.e. preservation by record, preservation in situ or a mix of these elements).

b) A methodology and timetable of site investigation and recording

c) Provision for site analysis

d) Provision for publication and dissemination of analysis and records

e) Provision for a programme of community based outreach

f) Provision for archive deposition

g) Nomination of a competent person/organisation to undertake the work

The schemes of archaeological investigation must only be undertaken in accordance with the approved details.

Pre-Occupation

11) No part of the development hereby approved shall be occupied / brought into use unless or until the new roundabout junction with the A17 has been provided as shown in principle on the drawings no. Drawing no's 17146-010 rev. E dated July 2019 as clarified by 17146 - SK200930.1 'Proposed Roundabout Layout Deflection Radii' dated September 2020 to the satisfaction of the Local Planning Authority.

12) No part of the development hereby approved shall be occupied / brought into use unless or until the extension of footway and cycle facilities from the Long Hollow Lane roundabout to the proposed site have been provided as shown in principle on the drawing no. no. 17146-010 rev. E Proposed Roundabout Layout and Pedestrian/Cycle Access Improvements' dated July 2019.

13) No part of the development hereby permitted shall be occupied until a Travel Plan has been submitted to and approved in writing by the Local Planning Authority. The Travel Plan shall set out proposals (including targets, a timetable and implementation) to promote travel by sustainable modes which are acceptable to the Local Planning Authority and shall include arrangements for monitoring of progress of the proposals. For the avoidance of doubt, the Travel Plan shall include the following proposals:

a) prior to the occupation of the development, details of a daily or more frequent return shuttle bus service to connect the development and travel hubs such as Newark's train stations and the main bus stops within Newark shall be submitted and approved in writing by the Local Planning Authority. This bus service shall be operational upon practical completion of the unit(s) and reviewed after at least three months, six months and after twelve months, and thereafter every twelve months and maintained for a period for a minimum period of 10 years from the commencement of the use unless, either a commercial bus service passing within 400 metres of the site comes into operation, or the bus service is proven to be no longer viable. If a commercial service does come into operation, or the bus service is shown to be no longer viable, then the applicant shall seek the written approval of the Local Planning Authority that the service is no longer required;

b) car usage minimisation including the provision of electrical charging points for cars and other vehicles and the use of car sharing.

c) details of the ride home facility for members of staff travelling to the site by sustainable modes of transport.

The Travel Plan shall be implemented in accordance with the timetable set out in that plan.

14) No part of the development hereby permitted shall be brought into use until provision has been made within the application site for parking of cycles in accordance with details submitted to and approved in writing by the Local Planning

Authority. The cycle stands shall be located near to the main entrance to the development, be covered and that area shall not thereafter be used for any purpose other than the parking of cycles.

Other

15) Reserved matter submissions shall be in accordance with the maximum parameters defined on Drawing No 111002 Rev C 'Parameters Plan' and Location Plan Drawing No 110001 Rev A.

16) No site clearance works including shrubbery removal shall take place and no tree shall be lopped, topped, felled or otherwise removed during the bird nesting period (beginning of March to September inclusive) unless a precautionary pre-start nesting bird survey has been carried out by a qualified ecologist/ornithologist and agreed in writing by the Local Planning Authority.

17) Any subsequent reserved matters application(s) shall be accompanied by a Biodiversity/Landscape Environmental Management Plan (LEMP). This shall include:

a) purpose, aims and objectives of the scheme;

b) a review of the site's ecological potential and any constraints;

c) description of target habitats and range of species appropriate for the site;

d) selection of appropriate strategies for creating/restoring target habitats or introducing target species. This shall include but not be limited to the provision of bat boxes;

e) selection of specific techniques and practices for establishing vegetation;

f) sources of habitat materials (e.g. plant stock) or species individuals;

g) method statement for site preparation and establishment of target features;

h) extent and location of proposed works;

i) aftercare and long term management;

j) the personnel responsible for the work;

k) timing of the works;

l) monitoring;

m) disposal of wastes arising from the works.

All habitat creation and/or restoration works shall be carried out in accordance with the approved details and timescales embodied within the scheme.

18) Any subsequent reserved matters application(s) shall be accompanied by the submission of a detailed lighting scheme. The detailed lighting scheme shall include site annotated plans showing lighting positions for the external spaces, facades, and structures they illuminate; a horizontal and vertical illuminance plan to include:

a) Details of light intrusion, source intensity, and upward light; and

b)Details of the lighting fittings including their design, colour, intensity and periods of illumination.

No external lighting works shall be installed within any part of the application site other than in accordance with the approved details or in accordance with any alternative external lighting scheme first submitted to and agreed in writing by the Local Planning Authority.

19) The following activities must not be carried out under any circumstances.

a) No fires to be lit on site within 10 metres of the nearest point of the canopy of any retained tree/hedgerow on or adjacent to the proposal site.

b) No equipment, signage, fencing etc shall be attached to or be supported by any retained tree on or adjacent to the application site,

c) No temporary access within designated root protection areas without the prior written approval of the Local Planning Authority.

d. No mixing of cement, dispensing of fuels or chemicals within 10 metres of any retained tree/hedgerow on or adjacent to the application site.

e) No soak- aways to be routed within the root protection areas of any retained tree/hedgerow on or adjacent to the application site.

f) No stripping of top soils, excavations or changing of levels to occur within the root protection areas of any retained tree/hedgerow on or adjacent to the application site.

g) No topsoil, building materials or other to be stored within the root protection areas of any retained tree/hedgerow on or adjacent to the application site.

h) No alterations or variations of the approved works or protection schemes shall be carried out without the prior written approval of the District Planning Authority.

20) No landscape works shall take place until the Local Planning Authority has approved in writing the full details of every tree, shrub, hedge to be planted (including its proposed location, species, size and approximate date of planting) and details of tree planting pits including associated irrigation measures, tree staking and guards, and structural cells.

21) The approved landscaping scheme shall be carried out within 6 months of the first occupation of any building or completion of the development, whichever is soonest. If within a period of 7 years from the date of planting any tree, shrub, hedgerow or replacement is removed, uprooted, destroyed or dies then another of the same species and size of the original shall be planted at the same place. Variations may only be planted on written permission of the Local Planning Authority.

22) Any subsequent reserved matters application(s) shall be accompanied by the submission of a Transport and Parking Appraisal in order to assess the level of on-site parking required for staff and visitors. This identified level of on-site parking shall be demonstrated on the submitted plans and shall also include for provision

within the site for a shuttle bus stop/parking bay. Development shall be carried out and retained in accordance with the approved details.

23) The archaeological site work must be undertaken only in full accordance with the approved written schemes referred to in the above Condition. The applicant/developer shall notify the Local Planning Authority of the intention to commence at least fourteen days before the start of archaeological work in order to facilitate adequate monitoring arrangements. No variation shall take place without prior consent of the Local Planning Authority.

24) Reports of the archaeologist's findings (required by the above condition) shall be submitted to the Local Planning Authority and the Historic Environment Record Officer at Nottinghamshire County Council within 6 months of the works hereby approved being commenced.

25) The development will require the diversion of existing public rights of way and no part of the development hereby permitted or any temporary works or structures shall obstruct the public right of way until approval has been secured and the diversion has been constructed in accordance with a detailed design and specification first submitted to and approved in writing by the Local Planning Authority.

26) Any subsequent reserved matters application(s) shall include details of sustainability measures and environmentally sustainable features proposed and to incorporated into the design of the development both during its construction and operation, which builds upon the aims of the submitted Energy and Sustainability Report 23/07/2020 (by Cudd Bentley).

End of Conditions

Levelling Up - The Logic of Logistics

A report demonstrating the wider economic, social and environmental benefits of the industrial & logistics sector

Contents

Foreword

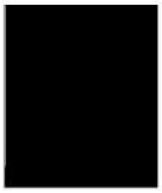
The Covid-19 pandemic has demonstrated that our industrial and logistics facilities are a key part of the nation's critical national infrastructure.

Alongside our supply chains, they support other important and growing sections of a strong economy and the way we live our lives by ensuring we have what we need at the right time. They are as crucial as the roads, rail, airport and port facilities needed to move goods around the country.

The sector also generates significant economic benefits supporting increasing numbers of high-quality jobs across the English regions. A thriving industrial and logistics sector is therefore critical to the government delivering on its ambitions to 'level up' across the UK with over 70% of demand for industrial and logistics space in the North of England and the Midlands.

Enabling the sector to reach its full potential is essential to the government's aspirations to address regional inequalities but our planning system remains a barrier and is restricting growth in the sector by not allocating enough land in appropriate locations. If the industrial and logistics sector is to play its full part in levelling up, it is vital that we create a more agile planning system which is more responsive to the sector's needs.

This latest BPF Industrial Committee report builds on previous research publications advocating for a more responsive planning system to the needs of the industrial and logistics sector. The report also provides a comprehensive overview of the growing economic, social value and environmental credentials of the sector as well as presenting case studies from within the BPF membership to reinforce these qualities.



Gwyn Stubbings
Planning Director, GLP
Chair of the BPF Industrial Committee

Executive Summary

An Economic Powerhouse

I&L facilities are Critical National Infrastructure

Food Supplies

Alongside their supply chains, they support the functioning of our economy and the way we live our lives, by ensuring we have what we need. They are as critical as the roads, rail, airport and port facilities needed to move goods around the country

Fuel Supplies

Vaccines and Medical Supplies

The I&L sector generates significant economic benefits

3.8 million
jobs in I&L in England

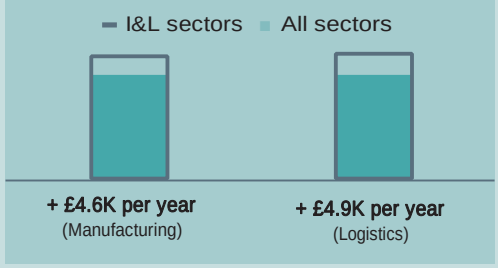
£232 billion
of GVA

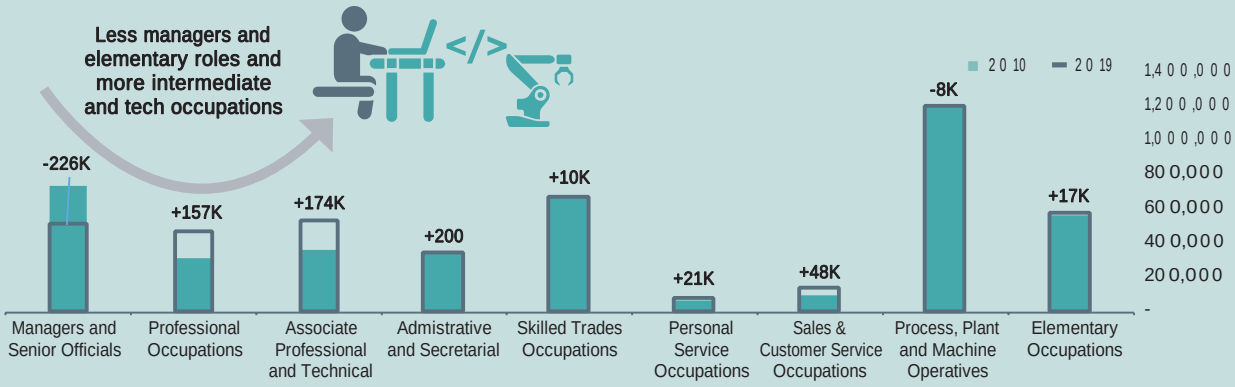
29% productivity
increase between 2025 and 2039

The I&L sector is subject to continuing misconceptions about average pay and skill levels

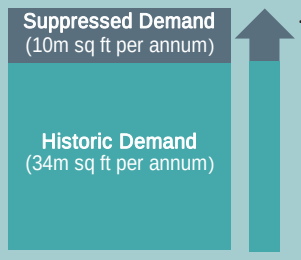
..and the occupations provided are becoming more diverse

..the reality is I&L jobs pay more





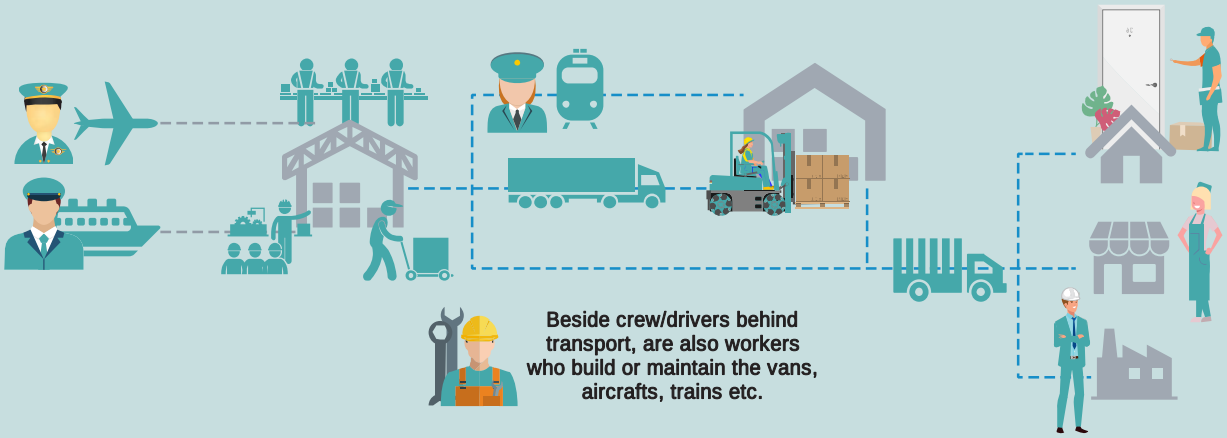
The UK planning system is restricting growth in the I&L sector by not allocating enough land in the right locations



..the historic lack of supply has restricted ('suppressed') demand by 29% nationally which should be provided for in the future. Future demand estimates should also consider housing, e-commerce and freight growth

Growing Social Value Credentials

I&L supply chains are far reaching and provide significant levels of employment in addition to onsite jobs



Beside crew/drivers behind transport, are also workers who build or maintain the vans, aircrafts, trains etc.

Most UK freight comes in via ports and airports

Freight is handled at port / air-side sheds before being distributed

Goods are moved mainly by HGV / LGV or rail to either distribution hubs (sheds) or direct to customers

End customers are either homes or businesses

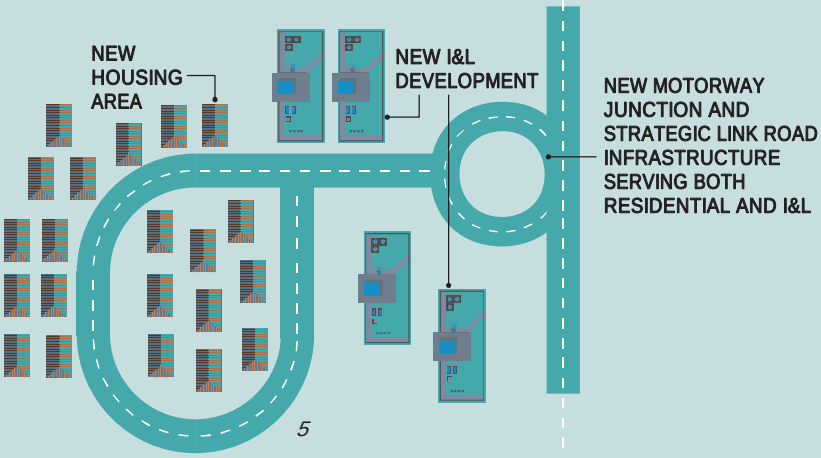
I&L inve[illegible] to support the Government's 'Levelling Up' Agenda

70% of I&L generated i[illegible] and Midl[illegible]

[illegible] the I&L sector's strong [illegible]nomic credentials and [illegible]wth prospects, future [illegible]L jobs can be crucial [illegible]ridging the GVA and [illegible]ductivity gap between [illegible]e North and South

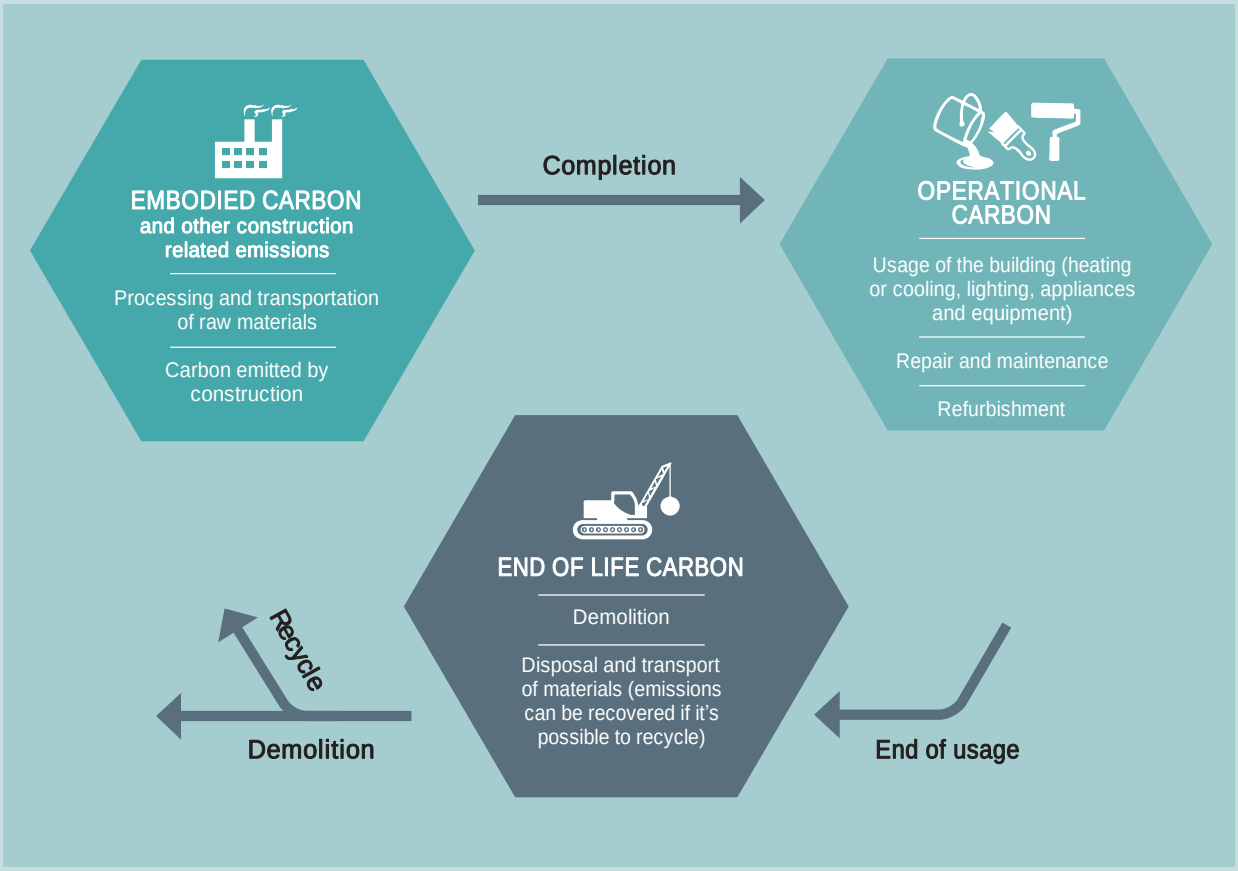
I&L investment can aid the delivery of new housing

I&L development can contribute to the delivery of new homes via the funding of strategic infrastructure such as motorway junction upgrades and link roads



A Green Recovery 'Boxed'

Carbon is present across all three phases of the property life cycle



EMBODIED CARBON

I&L facilities can be built with recycled, low carbon and sustainably sourced materials

INTERNATIONAL WELL BUILDING INSTITUTE

UK GBC

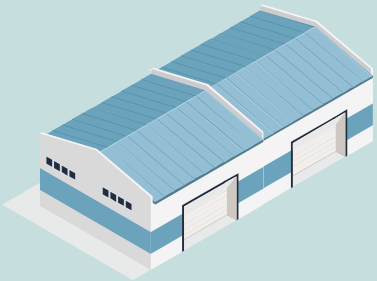
ADVANCING NET ZERO

BREEAM

I&L buildings are achieving outstanding results for constructions such as Net Zero Carbon recognition, and top EPC and BREEAM ratings

END OF LIFE CARBON

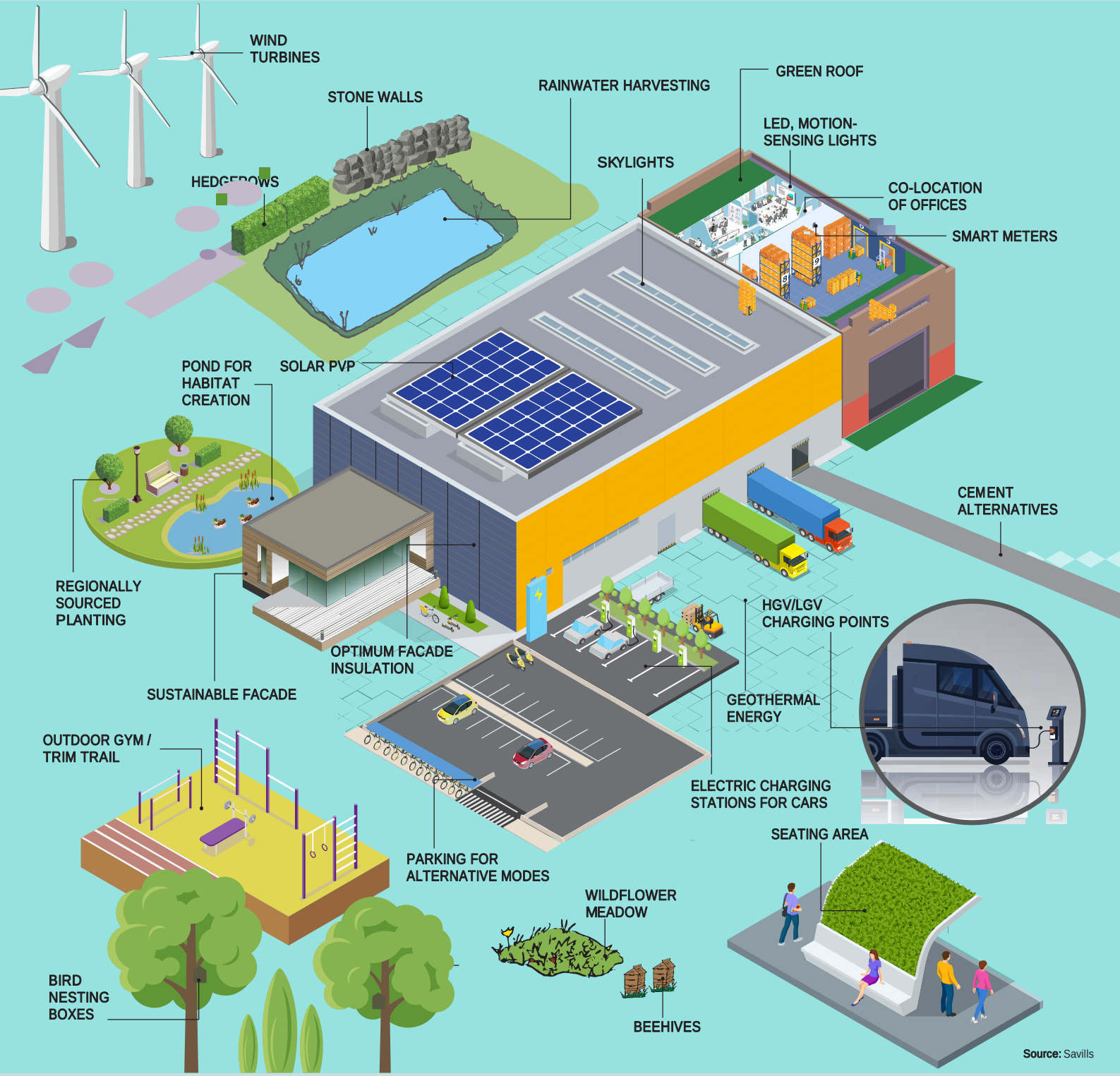
Modern I&L buildings have the advantage to be lightweight structures which are highly adaptable for a large range of uses



The steel frames used in I&L properties are much more easily recycled than concrete which is more common in other commercial uses

OPERATIONAL CARBON

I&L premises are innovating to reduce carbon



1. Introduction

The I&L sector is not only an economic powerhouse but also delivers significant social value and is embracing innovative ways to reduce carbon

The aim of this report is to evidence the importance of the industrial and logistics (I&L) sector to the UK, not just in terms of it being an 'Economic Powerhouse' but also in terms of its 'Growing Social Value Credentials' and contribution to 'A Green Recovery Boxed'. It is hoped that by reviewing the sector against economic, social and environmental objectives, this report presents a balanced and evidential account of the sector's future growth potential and the critical role it can play in a post Covid and Brexit UK.

The intended audience for the report are those integral to the sector's future growth and success including: national government policy makers, local authority planners, elected members, investors and tenants, as well as those keen to learn more about the sector.

The report is structured as follows:

- **An Economic Powerhouse** focuses on the sector's economic attributes, namely how I&L premises facilitate modern lives and therefore should be considered as 'Critical National Infrastructure,' similar to how major roads, ports, airports and rail freight interchanges are. We also discuss the sector's contribution to the national economy and the key growth drivers that are underpinning recording breaking levels of demand. This chapter finishes by discussing a number of flaws in the way future demand and land needs are currently assessed as part of Local Plans and how these flaws can be addressed by using an alternative method developed by Savills and St Modwen;

- **Growing Social Value Credentials** discusses the sectors contribution to local and regional communities, the Government's 'Levelling Up' agenda and the range of jobs and training opportunities the sector creates as part of its wider supply chains. We also discuss how I&L developments are contributing to strategic infrastructure to the benefit of new housing developments and how modern I&L premises are adopting a more human-centric approach to their design; and

- **A Green Recovery 'Boxed'** outlines how the sector is embracing sustainability via a reduction in carbon across all phases of a property's life cycle. We discuss how buildings are achieving net zero in construction; how carbon can be reduced during operations through clever building design solutions that improve energy supply and reduce energy demand; and we finally consider a property's end of life, exploring how I&L premises can be repurposed for other uses.

Reader's Note

When we refer to the industrial and logistics (I&L) sector we mean Light Industrial (formally B1c use class now part of Class E), General Industry (B2 use class) and Storage and Distribution (B8 use class). Effectively the primary use classes that require warehouses or factories (including ancillary offices) and associated yard spaces. These use classes typically cover the diverse range of industrial, manufacturing and logistics companies that operate within England.

2. An Economic Powerhouse

Recent global challenges have proven that the I&L sector's workers, stock of facilities and distribution networks are unquestionably 'critical national infrastructure'

I&L facilities and their supply chains support the functioning of our economy and the way we live our lives. The food we eat, the products and services we purchase, the materials used to build new homes and new infrastructure, even the vaccines that give us protection from Covid are stored, manufactured and distributed from warehouses and factories to 'us' the end customer. Without these facilities and the increasingly efficient supply chains that link them up with suppliers and end customers, the delivery of our purchases would be much slower, more expensive and we would have less choice.

It can be difficult to acknowledge the critical role played by the I&L sector when everything is running smoothly. It is much easier to understand its importance when things don't work quite as well. The six-day blockage of the Suez Canal in March 2021 created a domino effect on global supply chains, which affected not only those sectors relying on container shipping but also the transport sector as fuel vessels were delayed too. The shortage of HGV drivers in autumn 2021 led to fuel shortages in UK petrol stations and forced businesses to close down sites or cut product lines, adding to the backlog of production caused by the Covid pandemic.

These challenges have brought to the fore the importance of supply chain resilience and the need for a sufficient supply of appropriately located I&L premises. For instance, during the recent lockdowns, the I&L sector has been instrumental to ensure the effective delivery of medical stock in hospitals and food supplies on supermarket shelves. As vaccines were made available, the operation of effective distribution networks across transport modes was fundamental to supply vaccination centres while meeting stringent time frames and cold-store requirements. The pandemic has indeed proven that our daily life depends on the I&L sector. Its workers, stock of facilities and distribution networks are unquestionably 'critical national infrastructure.' The sector is also critical to the Government's 'Levelling Up' agenda given it is one of the few large sectors that invests more in the central and northern parts of the country rather than London and the south. We discuss this issue further in the 'Growing Social Value Credentials' chapter.

The sector's growth is critical to the UK's future prosperity

The sector is a significant employer of at least 3.8 million people. However the true number of jobs is likely much higher as this only relates to 'manufacturing, transportation and storage'[1] activities. The wider supply chains of I&L businesses

Key stats: I&L sector

3.8 million
jobs in I&L in England

£232 billion
of GVA

29% productivity
increase between 2025 and 2039

14% the share of I&L in the total economy in terms of GVA

Source: ONS, Oxford Economics, Savills[2]

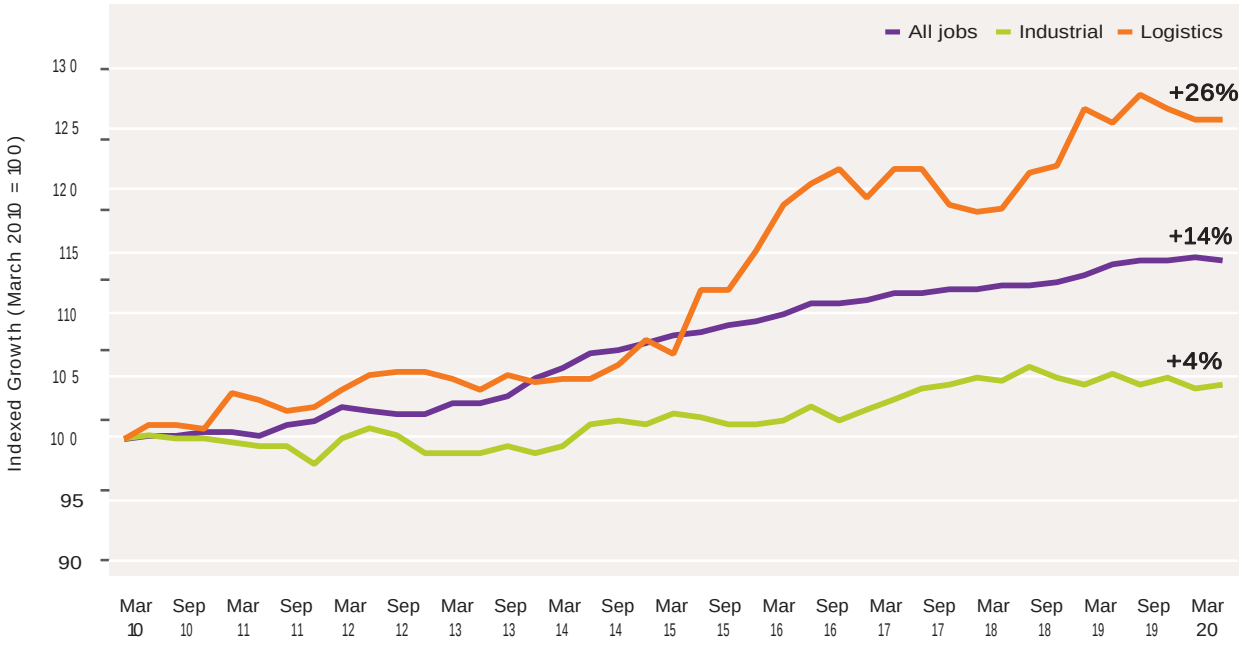
include other types of jobs not covered by this statistical classification. For instance, office based roles and professions such as product design, research & development and engineering are routinely found in I&L companies but fall within the 'professional services' classification.

A prime example of the wider economic impacts of I&L supply chains is Amazon. In addition to the 55,000 staff[3] it employs directly in the UK, the company is reported to have created 175,000 jobs via the 65,000 plus small and medium-sized enterprises (SMEs) who are selling professionally through Amazon[4]. While Amazon's diversity lies primarily in the different products it handles and distributes, I&L companies can differ greatly in terms of their operational characteristics and the activities conducted from their premises.

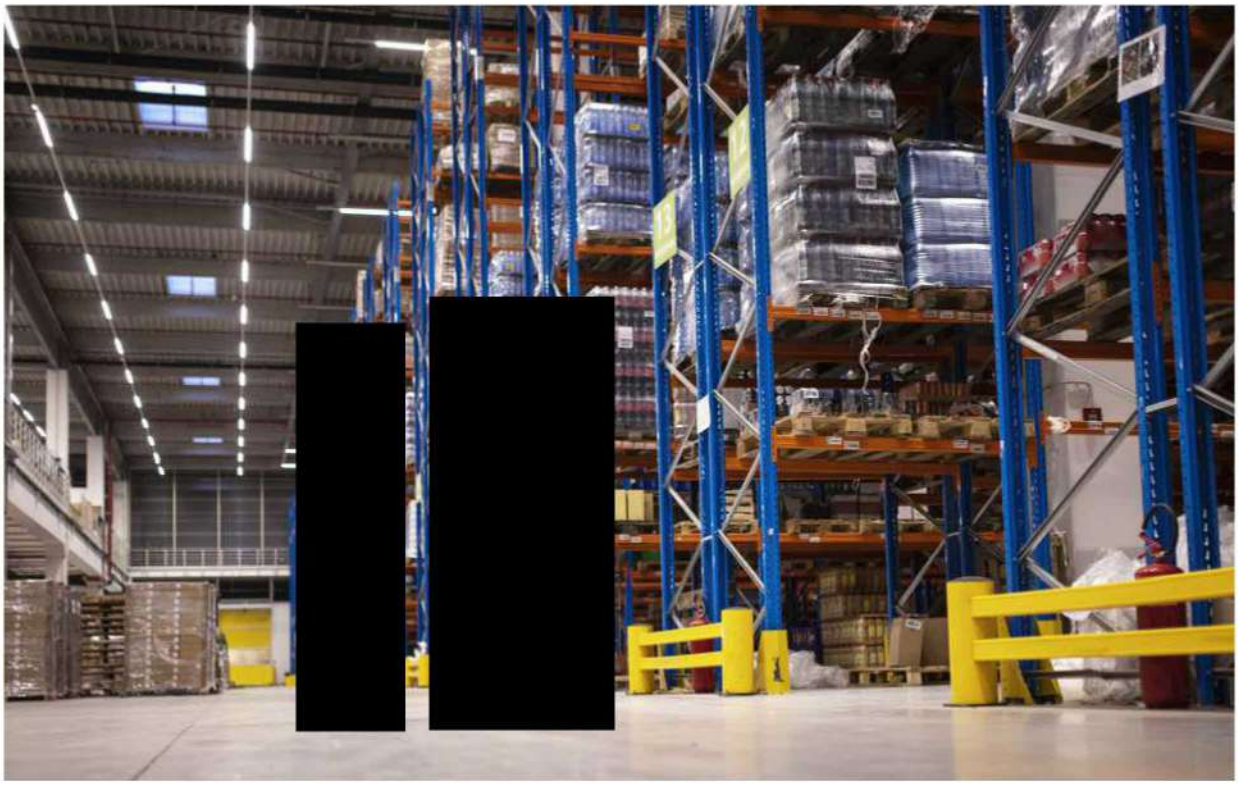
Not only is the I&L sector large, at 14% of the England economy, it is fast growing too. Over the last 10 years, jobs within the logistics part of the I&L sector have grown by 26% compared to only 14% across the economy as a whole. Its growth profile has been further accelerated by the Covid pandemic and Brexit as we discuss further below.

"Over the last 10 years, jobs within the logistics part of the I&L sector have grown by 26% compared to only 14% across the economy as a whole."

Historic Jobs Growth in England



Source: ONS, Workforce Jobs by Industry and Region, Savills

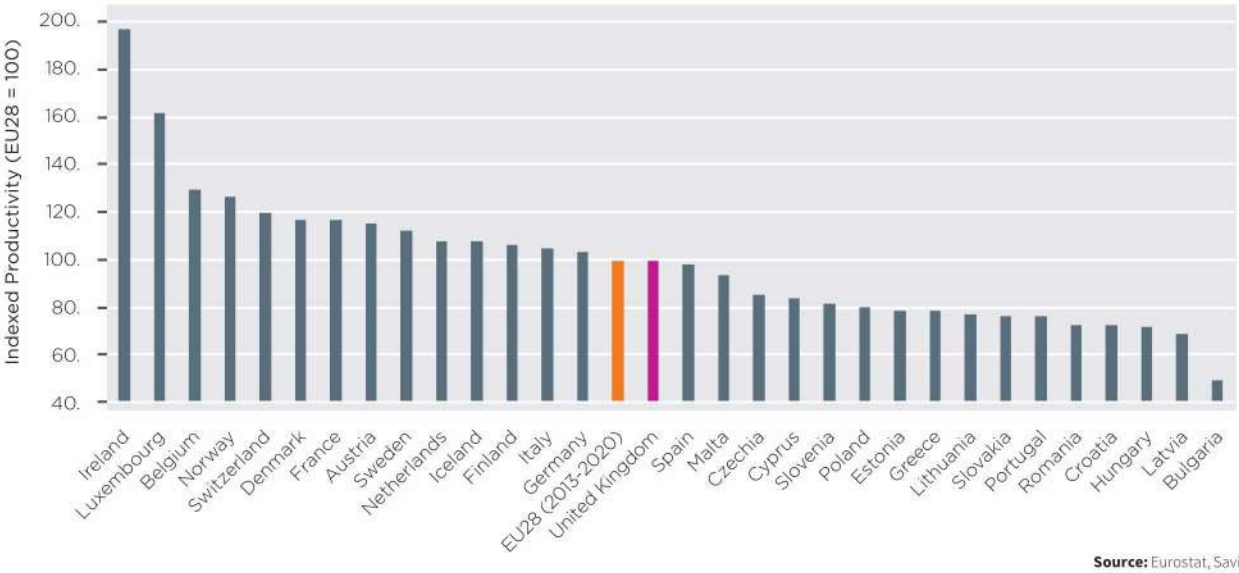


The sector is also highly productive with Gross Value Added (GVA)[5] per job currently at £58,000, some 12% higher than the average of all sectors. Its productivity is also predicted to grow at a faster pace, increasing by 29% between 2025 to 2039 compared to 18% across the UK economy as a whole[6]. These are extremely important statistics given the UK's labour productivity currently lags many of its western European peers as shown in the chart below.

Improving the UK's labour productivity will become increasingly important in a post Brexit world given its important bearing on attracting inward investment, ability to pay higher wages and higher tax revenues for the Government which can be reinvested in critical services and infrastructure.

The vision of the UK becoming a "high-wage, high-skill" economy was central to Prime Minister Boris Johnson's Conservative Party Conference speech on the 6th October 2021. Essential to achieving this vision will be to increase overall labour productivity, which in turn will require further growth in the more productive parts of the economy which undoubtedly include the I&L sector.

Labour productivity per person employed - 2019



Source: Eurostat, Savills

I&L growth is being driven by numerous factors

Not just e-commerce driving growth

While e-commerce grabs most of the headlines for driving growth in the sector, there are several growth drivers at play as illustrated below. Combined, these growth drivers are resulting in unpreceded demand for I&L premises.

Savills January 2022 Big Shed Briefing[7] reported that 55.1 million sqft (gross) of warehouse space had been transacted in 2021, setting a new annual record for take-up and being 86% above the long-term annual average.

I&L Growth Drivers

Source: Savills

Growth in UK freight

Freight arriving and leaving the UK needs to be sorted, packaged and distributed via a network of freight handling infrastructure (i.e. ports, airports, rail freight interchanges and motorways) and optimally located I&L premises in order to reach end customers.

Significant growth is forecast across all freight modes, which will increase demand for I&L space in the future. I&L premises should not be seen as separate from the infrastructure which enables goods to be moved around the UK, but should be considered critical national infrastructure itself.

I&L forecasts

LGV Traffic Forecasts

between +25% and +108% by 2050*

*from 2015 base

Rail Traffic Forecasts

+74% by 2043/44*

*from 2016 base

Global Air Freight Forecasts

+121% by 2039*

*from 2019 base

Port Tonnage Forecasts

+39% by 2050*

*from 2016 base

Source: DfT, MDS Transmodal for Network Rail, Boeing, DfT, Savills

E-Commerce Growth

E-Commerce growth is being driven by two factors.

Firstly, population growth. The UK Government has announced a housing shortage in response to demand consistently outstripping supply. To address this situation, the Government has set an annual housing target of 300,000 homes per annum in England which it is struggling to achieve with less than 225,000 homes delivered per annum over the last five years[8]. Based on current online retail spending data[9] and average household size[10], 300,000 homes per annum equates to an extra £1.3 billion per annum in online retail spending. Using the 'warehouse to homes ratio' discussed in the BPF's 'What Warehouse Where?' report[11], this level of housing growth could generate a warehouse requirement of 21 million sqft per annum on its own.

Secondly, technological improvements coupled with society's increasing preference to purchase goods and services online. Retail spending is growing faster than the rate of population growth (+71%[12] vs +14%[13] over the last 20 years). More of this retail spending is being conducted online, for instance in 2006 online sales accounted for only 3% increasing to 19% prior to the Covid pandemic in February 2020. The Covid pandemic has accelerated this growth with internet sales currently at 26%[14] and forecast to grow to 37% by 2025[15]. The growth in online shopping has significant implications on future I&L demand given that e-commerce requires over three times the logistics space compared to traditional brick-and-mortar retailers[16].

Faster Deliveries

Consumer expectations for same-day or next-day delivery are reshaping the operating models of logistics companies. For instance, the emergence of Zapp, Getir and Deliveroo who deliver groceries "in minutes" while most of the major retailer such as Boots, Next and many more deliver next day. These trends are expected to increase demand for logistics space as reduced delivery times are expected to benefit online retailers.

The Covid pandemic has accelerated this shift: a survey by Bringg[17] found that since the start of the pandemic 27% of retailers added same-day delivery for online orders as a fulfilment option and 1 in 3 retailers are planning to add same-day delivery options in the next 6 to 12 months.

To enable fast deliveries, stock needs to be held near the end customer before it's picked up for the last mile. This requires warehousing space in regional and local distribution hubs nearby to population centres. Large 3PLs like Amazon can more easily fit this model within their existing operations due to the sheer number of deliveries that they fulfil daily and their huge geographic coverage. For most retailers however this move will require investment in technology and upskilling of staff in addition to more warehousing space. In some cases, it could require setting up their own delivery fleet to improve margins, as already done by some large grocery retailers such as Sainsbury's, Tesco and Asda, to cope with the growing demand for online orders.

Near-shoring / re-shoring

The Covid pandemic and Brexit have created major disruptions for the sector's supply chains in the form of border restrictions, lockdowns and access to labour such as HGV drivers. In order to minimise similar disruptions in the future, many UK companies are moving their operations either back to the UK or closer by. Likewise certain I&L activities may be re-shored to the UK as it becomes more expensive to conduct business in the EU as a result of Brexit. According to a survey carried out in July 2020 by the Institute for Supply Management, 20% of firms are planning to or have already started to near-shore or re-shore. These findings are corroborated by a survey carried out by Savills[18] whereby over 80% of respondents expected the Covid pandemic to either 'greatly increase' or 'somewhat increase' on-shoring. This is likely to lead to higher domestic inventory requirements, further increasing long-term demand for I&L space.

Definitions

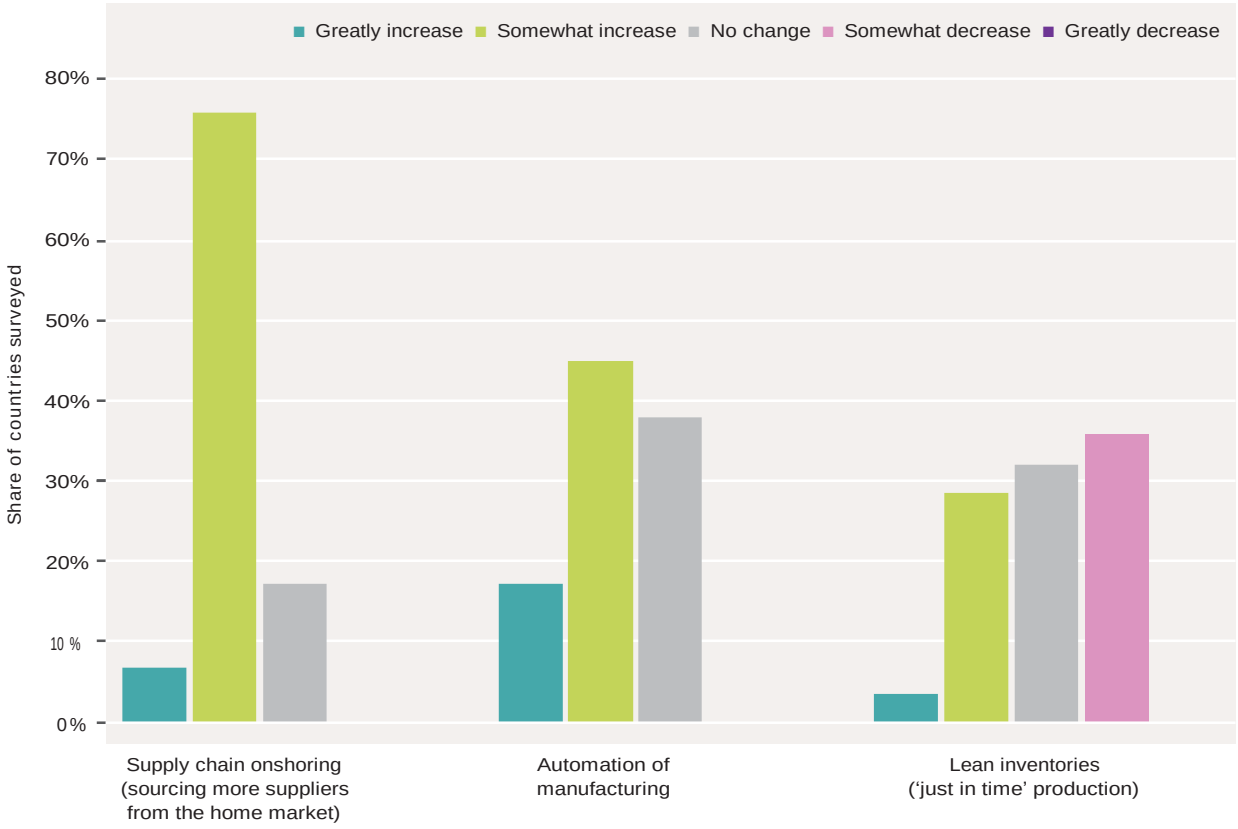
Near-shoring
Transferring a business operation to a nearby country as opposed to a more distant one (i.e. off-shoring)

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

"To enable fast deliveries, stock needs to be held near the end customer before it's picked up for the last mile. This requires warehousinfg space in regional and local distribution hubs nearby to population centres"

Certain I&L activities may be on-shored to the UK in response to international supply chain disruptions

Impact of Covid-19 on supply chains and manufacturing after pandemic has passed



Source: Savills Research

Co-locating different business functions

As the operations of modern day I&L companies have evolved via investments in automation and technology, so have the types of occupations found in the sector. Alongside traditional roles such as factory / warehouse managers, forklift operators and delivery drivers are a diverse range of new roles such as software engineers in charge of automated systems, supply chain managers and data analysts.

While these new and more diverse occupations are the result of operational changes in the sector, these changes are impacting the design and composition of modern I&L premises. One such change is the increased prevalence of office space being co-located with warehouse and manufacturing facilities to house these new roles, but also as a means of improving operational efficiency, reducing estate costs and fostering stronger collaboration between different business units (see Bidfood case study). Based on Savills data tracking large units over 100,000 sqft across the UK, the amount of office space found in I&L premises has increased over the last five years.

While the external appearance of premises occupied by a manufacturer may look similar to that occupied by a logistics company, their internal fit out, even a building's environmental performance are increasingly tailored to the specific requirements of individual companies. Modern I&L premises are also found to house gyms, cafes, restaurants, game rooms, and even hairdressers and physiotherapy suites. As a result, the types of activities undertaken, the levels of employment generated, and range of occupations found on site are very much company specific. This diversity evident in the sector is not adequately captured via the current planning use classes or standard job densities applied to I&L developments.

As detailed in our Gymshark case study below their diverse operations are being co-located together meaning its premises do not fit solely within either an office (E(g)(i)), research and development (E(g)(ii)), industrial processes (E(g)(iii)), general industrial (B2) or storage and distribution (B8) use class. Nor do any of its different activities operate as ancillary to one another but rather as separate components of a collective whole.

Case Study: Gymshark

Gymshark is a fast growing clothing company which is now expanding across multiple facilities in Blythe Valley Business Park (Solihull) to create a campus style working environment. The large warehouse chosen for their new innovation hub provided Gymshark with the necessary flexibility to house multiple functions, combining production, storage, design studio, innovation and office space, meeting rooms and breakout areas. The building is designed to bring together these diverse uses and the people covering different roles to promote innovation and integration across a number of functions.

Source: GymShark

Case Study: Bidfood

Purpose-built for Bidfood, the 117,400 sqft premises in the Slough Trading Estate include 22,000 sqft of head office accommodation arranged across three floors for marketing, commercial, quality control, finance, IT, customer services and telesales personnel. The remaining floorspace includes a customer presentation suite, temperature-controlled warehouse and distribution facility.

Source: SEGRO

Diverse and better paid occupations

The I&L sector is subject to several misconceptions about average pay levels, skills required, and types of spaces provided. It is not a low paid[19], low skilled employer, in fact, the reality is very different.

Firstly, average pay is higher than the UK average. Data from the Office for National Statistics (ONS) show annual wages above average at +£4,600 for Manufacturing and +£4,900 for Logistics.

I&L jobs pay more

Source: ONS (2021) ASHE, UK Gross Annual Pay in 2020

Secondly, while other sectors have contracted during the Covid pandemic the I&L sector has continued to expand. Data on online job ads tracked by ONS via Adzuna indicate that job postings have increased by three times for transport & logistics roles and two and a half times for manufacturing roles since the start of the pandemic[20]. Two notable examples behind these statistics are the John Lewis Partnership and Amazon:

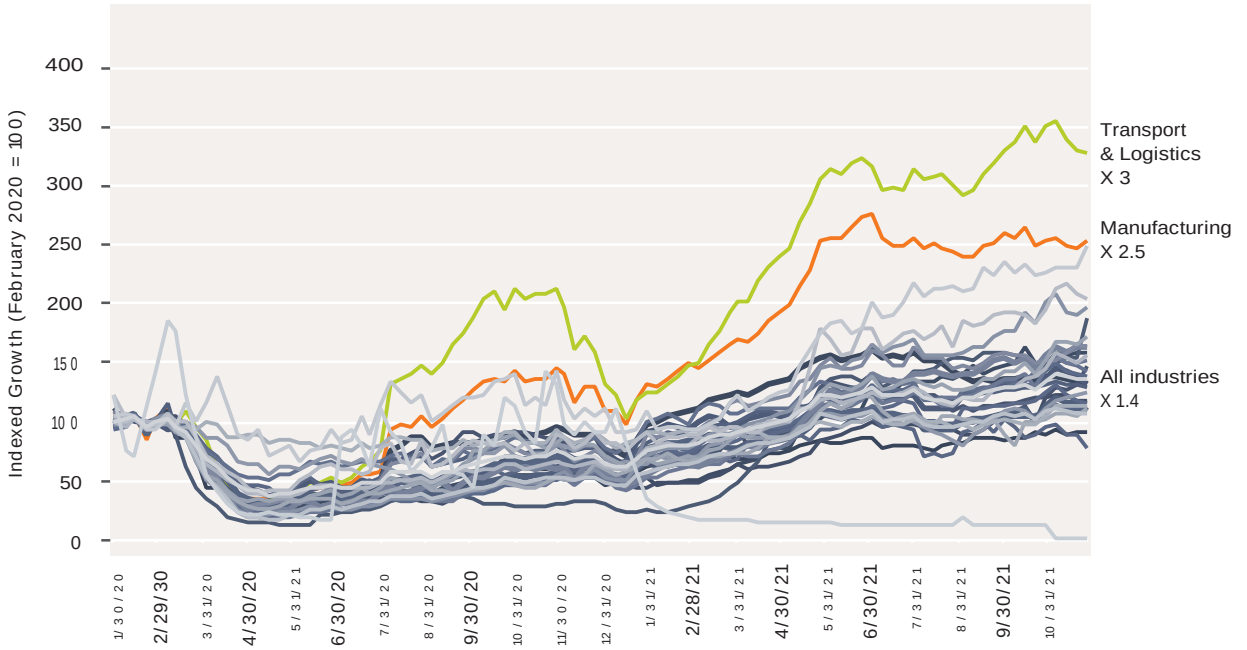
- The John Lewis Partnership is recruiting more than 550 permanent full-time driver and warehouse partner roles across their distribution centres and Waitrose.com and John Lewis.com customer delivery centres[21]; and

- Amazon committed to recruit 20,000 temporary staff for the busy Christmas period across its network of fulfilment centres, sort centres and delivery stations[22]. These are in addition to the 7,000 permanent jobs it announced in September 2021[23].

"The Industrial & Logistics sector is not a low paid, low skilled employer, in fact, the reality is very different"

I&L job adverts have increased during the pandemic

Up to 3 x more I&L job adverts

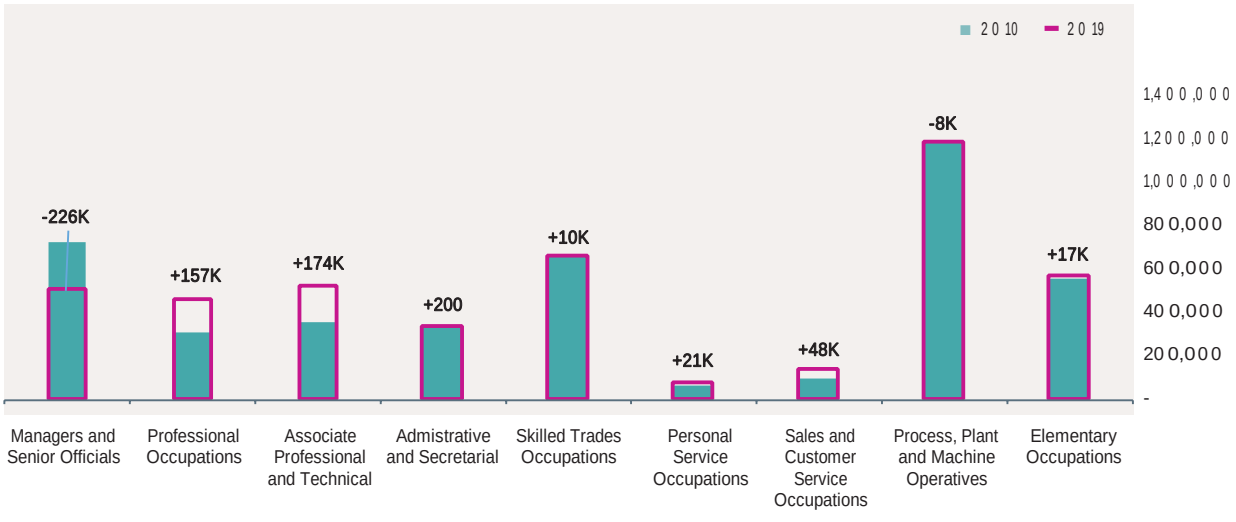


Source: ONS (2021), Online Job Advert Estimates based on Adzuna

Thirdly, I&L jobs have become increasingly diverse over the last decade. At the beginning of the decade the sector had a much more polarised distribution, with a higher share of managers at one end of the spectrum and more plant and machinery operatives and elementary occupations at the other end. Today we see a higher share of Professional and Associate Professional and Technical roles, typically associated with higher-skilled engineering and technological professions.

This is in response to increased automation and robotics in the sector and more advanced supply chain processes. These office-based roles are increasingly co-locating alongside production and logistics uses as it is convenient for these people to be closer to the operations they control and analyse. This increased occupational diversity means the I&L sector can play an important role in re-employing people that have lost jobs in other sectors of the economy as a result of the Covid pandemic.

I&L occupations are becoming more diverse



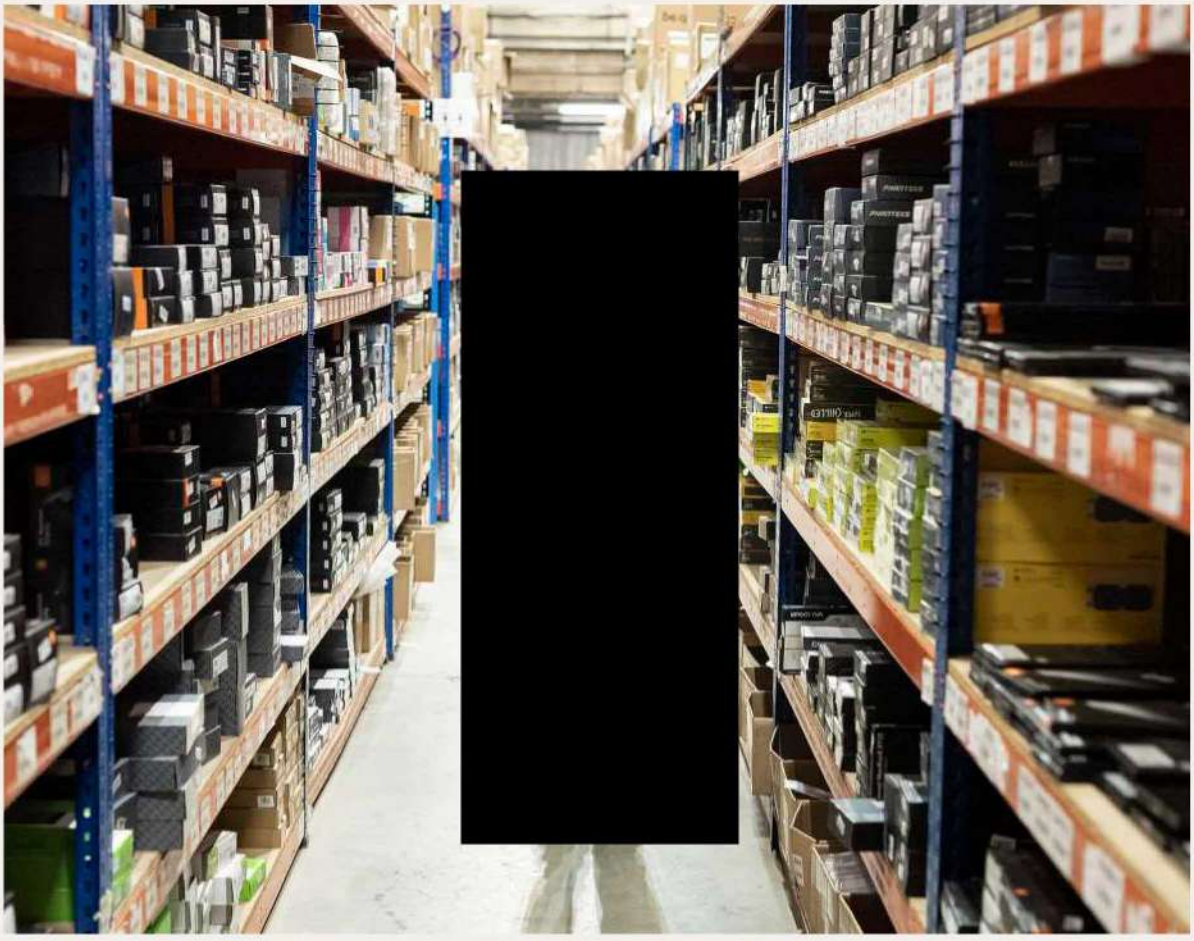
Source: ONS, APS

Case Study: Overclockers

Overclockers are a modern British logistics and e-commerce success story. Initially founded in 1999 as a web retailer of custom 'overclocked' PCs, Overclockers started life trading from a tiny, 400 square foot warehouse in Stoke-on-Trent. It was, in many respects, a precursor to the personalisation and e-commerce boom that has transformed the way Britain likes to shop today. In 2021, following phenomenal business performance during the pandemic, which saw record demand for high performance computers, gaming hardware, and personalisation in the era of working-from-home, Overclockers now employ 107 staff across three areas and will soon move into a new, 100,000 square foot St. Modwen built warehouse.

Overclockers are a traditional logistics business in the sense that they receive and ship products to and from Europe, and all over the world. However, the extreme technical personalisation service that they offer to customers – Overclockers configure some of the world's most powerful personal computers – means its workforce is highly skilled, with a significant proportion of the team hired as apprentices and trained on-the-job.

Employing and nurturing a highly skilled, local workforce is not the only service that Overclockers provides to society. Some of its clientele include police forces, who require especially powerful computers to help them solve crimes, Formula One teams, who operate right at the cutting-edge of technology and data, and universities, who have an increasing need for ever-more-powerful computers to help them find solutions for some of the world's most pressing issues, including climate change.



Source: St Modwen

The UK planning system is restricting growth

The strong growth expected in the I&L sector, and the jobs, investment and productivity it will bring, will not materialise unless sufficient land is allocated in the right locations. The planning system is the guardian for allocating land, therefore it is critical the employment evidence which support Local Plans do a more accurate job at assessing future demand.

This issue has been central to the recommendations of other BPF publications, most recently the BPF's Employment Land Manifesto which recommends:

- Introducing a *Presumption in Favour of Logistics Development* within the NPPG when precise criteria are met. This is needed as Local Plans can take years to be adopted and therefore are completely out of kilter with the pace of market changes;
- Ensuring *Local Plans allocate sites in the right locations* to respond to a broad range of market needs;
- Modernising Employment Land Reviews to allow for the utilisation of 'real time' information so that they can be kept up to date; and
- Introducing an *Employment Land Delivery Test* to ensure that a commensurate amount of employment land is brought forward to counterbalance housing and that any employment land lost to other uses is delivered in the right locations. If a local planning authority failed to meet the delivery test, a presumption in favour of sustainable logistics development could be engaged.

The attributes of an optimal I&L location

Source: Savills

Although the National Planning Policy Framework (NPPF) provides a clear and positive policy context to assessing future economic needs, the Planning Practice Guidance that accompanies the NPPF lacks the same clarity. Economic need plays second fiddle to housing need in the guidance, the latter being subject to a standard methodology with a series of unambiguous steps set out to establish the minimum annual housing need for each local authority area.

There is specific reference to the critical role of logistics and the need for market analysis and engagement with stakeholders, but the guidance fails to provide a clear and robust approach to ensuring I&L needs are met. As a consequence, an array of local authority strategies are being adopted resulting, in most cases, too little land being allocated to meet current and future market demand. This is primarily due to these strategies being backwards looking and projecting forward historic trends as a proxy for future demand. As a result, modern day growth drivers are not taken into account, for example: housing growth, online retailing growth, increasing UK freight volumes and the need for larger premises, all of which generate increased demand for I&L land and floorspace. The main NPPG methods for estimating future land needs and their deficiencies are summarised below.

The UK planning system is restricting growth in the I&L sector by not allocating enough land in the right locations

Current NPPG methods are not fit for purpose

Project forward future demand based on either **historic completions** or **historic net absorption** (take up)	Underestimates future need as the **I&L sector** has been **supply constrained for the majority of the last decade**
Consultations with relevant organisations, studies of business trends, and understanding of innovative and changing business models	Not sufficient on its own, most **agents don't take longer term view** which are essential to forecasting employment land need. Transactional focus, not land focus
Demographically derived assessments of current and future local labour supply > usually look at **housing growth** either within LA or wider FEMA	Housing growth at the local level has no relationship to **I&L markets** which have a **more regional** demand profile. A local focus restricts need
Use **3rd party job projections** such as Oxford Economics, Experian, etc. and translate into floorspace requirement	**No transparency** and therefore limited scrutiny. **Do not have a land focus** which is the core requirement to facilitate I&L growth

Source: Savills

The inadequacies of these models and their application is evident in that supply historically has not kept pace with demand. When demand cannot be fully satisfied occupiers vie for limited available space pushing up rents. This is what we have seen over the last decade with 61% rental growth[24], more than double the rate of inflation.

At the national level, the market equilibrium level where supply and demand are broadly in balance and rents are more stable is around 8% availability. This benchmark rate is found in a number of prominent publications such as the GLA's Land for Industry and Transport Supplementary Planning Guidance (SPG). England's I&L market has been below this level for over seven years clearly demonstrating the failure of the current NPPG methods in estimating demand accurately. Put another Net absorption is a leading measure of demand, comparing occupied space (move-ins) versus vacated space (move-outs).

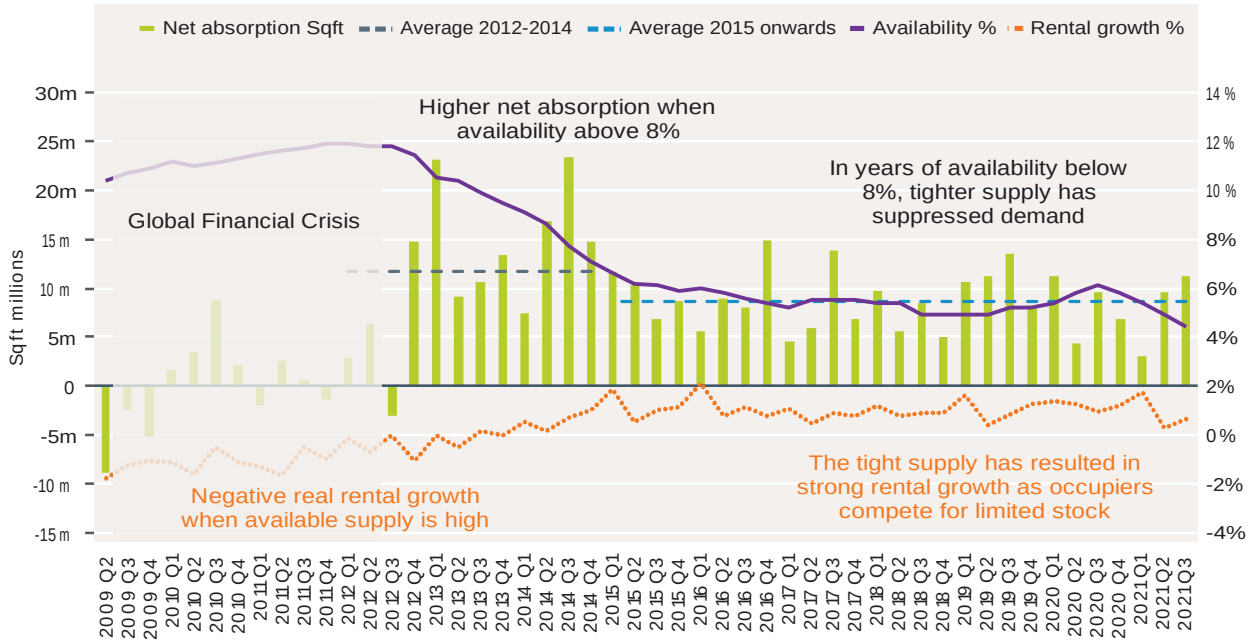
This relationship between supply and demand is clearly shown in the chart below. When available supply was higher at around 10%-12% in 2012-2014 net absorption averaged 47 million sqft per annum (net). This is higher than the average net absorption more recently from 2015-2020 at 34 million sqft (net) despite the UK only having just emerged from the Global Financial Crisis (GFC). The key reason why leasing demand was higher in 2012-2014, despite the impact of the GFC, is that sufficient available supply existed to accommodate demand, even though overall demand was weaker compared to the more recent period post 2015. After 2015, available supply has been well below the equilibrium rate of 8% which has suppressed overall demand as it could not all be accommodated.

A further clear indicator of demand exceeding supply is strong rental growth. As can be seen from the bottom part of the chart real rents[25] have been growing strongly since 2015 when availability dropped below 8%. This is distinct from the period after the GFC (2012-2014) when real rental growth was either negative or zero, indicating there was more than enough supply to meet demand.

Definitions

Net absorption is a leading measure of demand, comparing occupied space (move-ins) versus vacated space (move-outs).

Historic supply constraints have suppressed demand



Source: Savills

To help address the supply / demand imbalance Savills and St Modwen have developed a new methodology built upon the principle of 'suppressed demand' that accounts for demand that has been lost due to supply shortages. The calculation of suppressed demand can then be added to historic demand projections to give a more accurate picture of likely demand into the future.

The high level steps in the Savills / St Modwen employment land estimation model includes:

A. Find a market's equilibrium availability rate: This is around 8% at the national level but can alter slightly from market to market. A market's equilibrium rate is either when rents are broadly stable or when rental growth transitions from being negative or stable to growing strongly year on year.

B. Identify those years when available floorspace was below the equilibrium rate: This involves identifying previous years when availability was below the 8% equilibrium rate.

C. Calculate suppressed demand: Here you calculate how much demand the market should have had in those years of tight supply in order to be at the equilibrium rate. For instance, if the equilibrium rate is 8% but the market had 5% in a given year, the 3% difference needs to be translated into floorspace.

Next, you calculate the average of the ratio between net absorption and available floorspace for every year over the lookback period. This ratio is then applied specifically to the availability uplift that was needed in those years of tight supply to reach the equilibrium rate. This provides a suppressed demand calculation for each year when actual availability was lower than the equilibrium rate. These are then added together to give a total suppressed demand over the lookback period.

D. Add suppressed demand to historic trend: Finally the suppressed demand is added to the historic demand over the lookback period. The annualised figure of this combination can then be projected forward over the Local Plan period to provide a more accurate estimate of future demand.

This methodology when run at the England level estimates future demand will be at least 29% higher than historic levels, equating to a minimum of 44 million sqft per annum (net). A useful cross reference to make here is with the BPF's previous report 'What Warehouse Where?' which estimated each home could generate a need of 69 sqft of warehouse space or 21 million sqft per annum based on the Government's annual housing target of 300,000 homes. While Savills calculations are for both warehousing and industrial demand (i.e. the entire I&L sector), this comparison usefully gives an idea of the significant contribution warehouse needs from new homes will make to overall future I&L demand (of up to 48%).

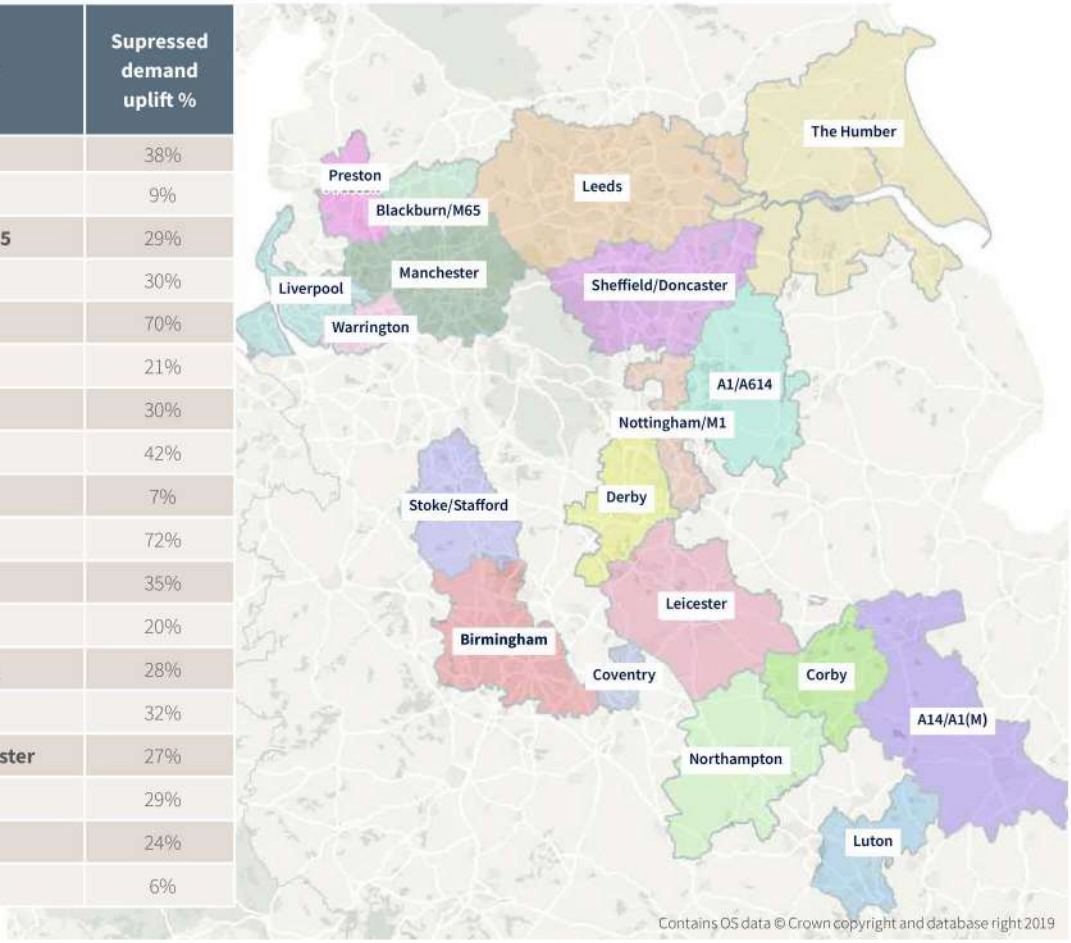
If supply improves in England, future demand p.a. (net) will be at least 29% higher than historic levels

Source: Savills

Savills has tested its suppressed demand model across 19 key I&L markets in England. Many of these markets have historically experienced leasing demand well beyond the supply of available land and floorspace. The percentages on the table indicate how much additional demand (as a minimum) should be planned for in the future within each market above historic levels. While these results are based on wider market areas made up of a collection of local authorities, the model can be run at the national level, the individual local authority level as well as more bespoke market areas.

Markets Tested for Suppressed Demand in England

Market	Supressed demand uplift %
A1/A614	38%
A14/A1(M)	9%
Birmingham/M65	29%
Blackburn/M65	30%
Corby	70%
Coventry	21%
Derby	30%
Leeds	42%
Liverpool	7%
Luton	72%
Manchester	35%
Northampton	20%
Nottingham/M1	28%
Preston	32%
Sheffield/Doncaster	27%
Stoke/Stafford	29%
The Humber	24%
Warrington	6%



Source: Savills 2021

The above suppressed demand figures should be considered minimums as their focus is on correcting past trends by accounting for lost demand due to historic supply constraints. This more accurate historic trend should also be uplifted further to account for current day and future demand drivers, the key ones, as discussed above, being online retailing growth and growth in freight volumes. Savills has developed a method for calculating these factors too (please see below contact details for further information).

For further information on the Savills/St Modwen methodology, please contact either:

Mark Powney
Director - Economics, Savills
[redacted]

Irene Guillet
Associate - Economics, Savills
[redacted]

Richard Hickman
Head of Planning – Industrial & Logistics, St Modwen
[redacted]

3. Growing Social Value Credentials

I&L development generates direct and indirect jobs and substantial social value in the form of training and apprenticeships

The social value of I&L supply chains

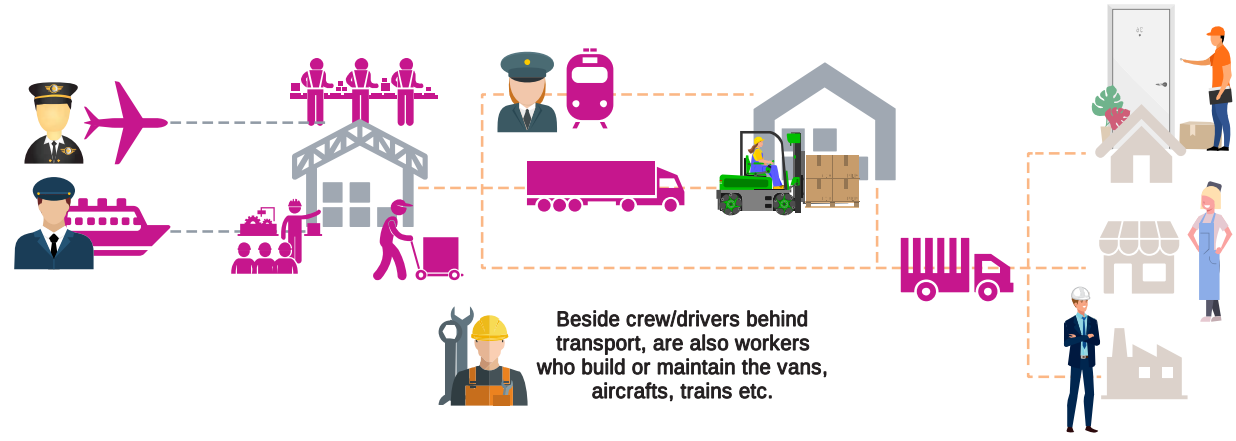
I&L developments generate significant jobs and economic benefits as part of their wider supply chains in addition to onsite employment. In turn, these economic benefits create social value in the form of apprenticeships, training and upskilling opportunities for local people.

I&L jobs range from entry level graduates to highly skilled engineering and management roles. This wider supply chain employment is often overlooked in favour of the higher on-site job densities for retail and office uses. However, in many cases, the office and retail jobs envisaged in Local Plans are not created given these uses are unviable to build in many locations throughout the country.

In terms of wider supply chain employment, production plants and warehouses require goods to be transported and delivered between their suppliers and end use customers. This creates the need for drivers of Heavy Goods Vehicles (HGVs) and Light Goods Vehicles (LGVs). LGV licences alone have increased by 83% over the last two decades[26] in response to the rise in online shopping and subsequent expansion of the I&L sector. This increase in HGVs and LGVs creates jobs involved in their manufacture, maintenance and repair.

The growth of the UK's freight industry also creates significant jobs. I&L premises are a critical link in the chain alongside the key freight modes that allow goods to enter, leave and move around the country (i.e. ports, airports, rail freight interchanges and motorways). Like warehouses and factories, these freight handling facilities generate employment to drive the planes, trains and boats, as well as jobs involved in their maintenance and repair. Jobs are also created at ports, airports and rail freight interchanges as part of their operation.

Employment within wider I&L supply chains



Source: Savills

As discussed above, the sector has also increased its share significantly of professional occupations (plus 157k) and associate professional and technical roles (plus 174k) over the last decade. Many of these roles are involved in supply chain management, engineering linked to the sector's increased automation, sales and marketing and even research and development into future advancements such as drone deliveries and autonomous driving vehicles.

The sector also generates significant construction and apprenticeship roles which will increase further as it expands into the future. As discussed earlier, Savills estimate future I&L needs in England to be at least an additional 44 million sqft (net) per annum. This is an uplift of 29% against the historic 10 year trend and accounts for suppressed demand (i.e. demand that has not been accommodated historically due to the lack of available supply). This future demand, if facilitated via the bringing forward of ample land supply, will give rise to a vast construction programme that will support 45,400 jobs per annum. Of these, 400 construction apprenticeships will be created each year, delivering a social value of over £7.8 million per annum[27]. Based on Savills research on local procurement benefits, we expect this construction programme to generate £440 million of social value benefits for local communities[28].

The I&L sector also delivers on average 41,100 apprenticeships starts per annum[29]. This is particularly important given the high levels of youth unemployment in England which currently stands at 14.6%[30]. If the sector is able to expand consistent with Savills estimate of future demand, the number of apprenticeships could grow to 53,000 starts annually; which is equivalent to over half a million apprenticeships over the next 10 years.

Case Study: From unemployed to full-time, permanent employee

Jehan's journey to employment shows her determination to seize the opportunity enabled by I&L development at Hinckley Park and Mercia Park. Below are some excerpts from Jehan's story as told on winvic.co.uk.

"Back in April 2019 I was unemployed and my Jobcentre Plus assessor told me about a jobs fair that was taking place. I spoke to a number of different organisations and businesses there but one offering that really caught my attention was a training course being offered by North Warwickshire and South Leicestershire College, IM Properties, Winvic and a local groundworks subcontractor, which focused on groundworks and health and safety. […]

I was accepted on to the three-week course and in June 2019 I walked into a college classroom as the only female out of 22 attendees – I didn't feel apprehensive about this, but instead, I thought prove you can do it and see what happens. The first week focused on employability skills, such as interview techniques, the second was all about groundworks – and this was all on-site at Hinckley Park as the earthworks were being undertaken there – and the last was back in the classroom for health and safety training, sitting exams and a job interview with a Winvic groundworks subcontractor on the project."

Upon completion of the course, Jehan obtained her CSCS card, an employability certificate and a City and Guilds Level 1 in Health and Safety. The subcontractor she had the interview with passed on her CV to their network and in November 2020 Jehan was invited to an interview with Winvic's HSEQ Director Ian Goodhead, for a Covid Marshall role at the fit-out project at Hinckley Park. A week later she was already on site to start her new job.

After her Covid Marshall role ended she started to look for other options. "When discussing potential options with Ian

Goodhead, a position at IM Properties site, Mercia Park was mentioned to me. I had an interview with my now Project Manager Frank Hayes and HSEQ Manager David Powell, I'm happy to say that I'm now an Assistant Site Manager. I've now undertaken my Fire Marshall, Fire Co-ordinator, First Aid, IPAF, cherry picker, scissor lift and Confined Space Management training and I'm about to undertake my Temporary Works Co-ordinator Training and NEBOSH, which I'm hoping to complete it over six to eight weeks via distance learning.

In one way it's still hard to believe that a three-week training course through attending a jobs fair has really led me to a complete career change, a stable job in an area I was interested in AND that it's with a successful and supportive company!"

Source: https://www.winvic.co.uk/news/how-laying-social-value-foundations-constructs-new-careers-meet-jehan-our-latest-assistant-site-manager/

Case Study: GLP Centre of Logistics Education & Research (CLEAR) at Magna Park Lutterworth

The Centre for Logistics, Education and Research (CLEAR) is a research, innovation, education, and training facility that is being developed through a partnership between industry and education in Magna Park, Lutterworth. CLEAR will provide skills training and professional development at all levels across the spectrum of logistics and supply chain roles, creating training pathways of progression for new entrants and established talent alike. The centre will give students the opportunity to learn while they earn via a portfolio of work based, facility based or online learning options. Delivery of training will be by North Warwickshire and South Leicestershire College (NWSLC) and Aston University, working in partnership to ensure that CLEAR offers training pathways of progression. Together they have complementary skills and expertise that allows for the 'one stop shop' delivery of a fully integrated and holistic programme of applied research, education, training and professional development.

Source: https://www.nwslc.ac.uk/, GLP

Case Study: Prologis Education Hub at DIRFT

The Education Hub is a 9,551 sqft centre for logistics training and education that can be used by occupiers at Daventry International Rail Freight Terminal (DIRFT). The building has three distinct areas, a reception and café, three flexible training rooms and three smaller meeting rooms. The Hub is also home to the Prologis Warehousing and Logistics Training Programme (PWLTP), a digital learning and development programme aimed at training those leaving education and re-skilling the unemployed by equipping them with the knowledge needed to pursue a career in logistics.

Source: Stephen + George[31], Prologis

The I&L sector can play a pivotal role as part of the Government's levelling up agenda

The Levelling Up Agenda

Traditionally, there has been a North-South divide in the UK whereby regions in the South[32] perform better across a number of socio-economic indicators compared to regions in the North[33]. The Government has repeatedly tried to address this issue for a long time with initiatives aimed at 'rebalancing' the economy and a Levelling Up White Paper due to be published in the coming months.

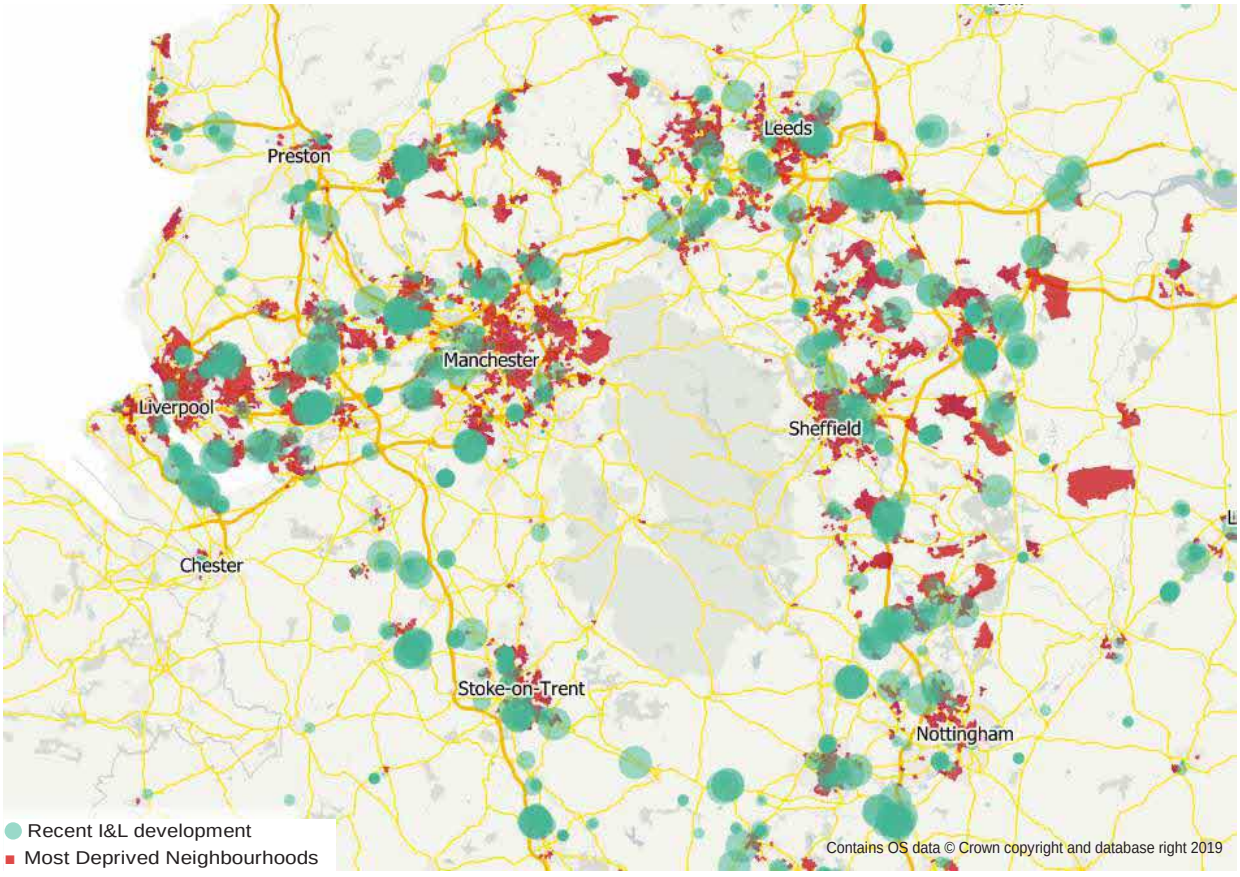
The I&L sector can play a pivotal role as part of the Government's levelling up agenda. In GVA terms, the South accounts for 63% of England's total GVA while the North accounts for only 37%. However, over the last five years I&L demand (net absorption) in the North has accounted for 70% of the country's total demand. Looking at a more granular level, a region such as the East Midlands that accounts for 7% of the country's GVA, has attracted 19% of the country's I&L demand in the last five years.

This strong growth in I&L in the North equates to circa 113 million sqft of net additional floorspace[34] or 117,000 jobs[35] over the last five years. As discussed above the sector provides a diverse range of jobs with higher levels of pay and GVA compared to the 'all sector' average. These jobs will be crucial in bridging the GVA and productivity gap between the North and South.

Another key focus is to provide better job opportunities for deprived communities outside the South East. The chart below show that the hotspots for I&L investment over the last five years are located nearby to deprived communities demonstrating the important role the sector can play in providing access to local jobs.

The Planning System is starting to recognise the link between I&L jobs and helping address deprivation. For example, in a recent called-in decision[36] for an I&L development in St Helens, the Secretary of State agreed with the Inspector that the jobs brought about by the development "would have a tangible benefit to the local economy and would provide an early opportunity to help address [..] deprivation issues".

I&L investment is located nearby deprived areas in the North



Source: Savills 2021

I&L investment can aid the delivery of new housing

Tackling the under-supply of homes has now been at the forefront of the planning system's objectives for many years. Major I&L investments are increasingly becoming integral to the delivery of new homes. Some key advantages of bringing forward I&L development alongside residential include:

- The strong I&L market can achieve healthy uplifts in land value and therefore can usefully contribute to funding strategic infrastructure such as new and improved motorway junctions and link roads. This infrastructure is also critical to enabling new residential development. Many other commercial uses on the other hand are viability challenged and in many cases are unable to make an upfront contribution to wider infrastructure provision.

- Given the strength of occupier demand, the I&L component of Garden Villages and other mixed use developments can be delivered quickly creating local job opportunities for the new incoming residential population. This can support higher levels of self-containment (i.e. local people living and working locally) and higher usage of greener modes of transport (i.e. walking, cycling and public transport) given the reduced distances people are travelling to work. The creation of early jobs is also vital given other commercial uses such as office, retail and leisure uses within town centres typically take longer to come forward as they require a critical mass of housing to be in place to underpin their demand.

Some current examples of I&L investment helping to deliver residential development include:

- Linmere in Houghton Regis (see case study box)

- Hayes Nestle Factory (see case study box)

- Milton Keynes East, which has recently gained outline planning permission and is set to deliver 5,000 homes and 105ha of logistics led employment. The delivery of the employment land at J14 will open the site up and deliver the initial supporting infrastructure.

Case Study: Linmere in Houghton Regis

Linmere in Houghton Regis is a 5,100 unit residential development with an infrastructure cost of approximately £100 million and requiring an upfront payment of £45 million towards the M1/A5 link. The infrastructure payments significantly impacted viability and meant the development could not achieve the level of returns required. However, the Site included 1.23 million sq ft of B8 which was sold to Lidl in a £90 million deal facilitated by Savills. This made the development almost cost neutral and enabled the consortium of owners to progress with servicing and selling the residential units.

Source: Houghton Regis News Desk, http://www.hrnd.co.uk/2013/01/green-field-sites-around-houghton-regis.html

Case Study: Hayes Nestle Factory

Following Nestle's announcement in 2012 to close the former coffee factory, the site is being regenerated to deliver over 1,386 new homes, alongside a 240,000 sq. ft industrial park. The scheme is being brought forward by SEGRO and Barratt London and will create at least 500 permanent jobs and deliver over 3 hectares of public open space, a 1.3 km trim trail and 300 m of canal frontage for the community to enjoy.

Source: SEGRO

More than just warehouses and factories

While the office sector has outwardly embraced health and wellness as part of building design for some time, it has raced up the agenda within the I&L sector recently. I&L developers and occupiers are increasingly adopting the WELL Building Standard which is delivering a more human-centric approach to the design of I&L premises.

The Seven Concepts of the WELL Building Standard

1. Air: Optimise and achieve indoor air quality. Strategies include removal of airborne contaminants, prevention and purification.

2. Water: Optimise water quality while promoting accessibility. Strategies include removal of contaminants through filtration and treatment, and strategic placement.

3. Nourishment: Encourage healthy eating habits by providing occupants with healthier food choices, behavioural cues, and knowledge about nutrient quality.

4. Light: Minimise disruption to the body's circadian rhythm. Requrements for window performance and design, light output and lighting controls, and task-appropriate illumination levels are included to improve energy, mood and productivity.

5. Fitness: Utilise building design technologies and knowledge-based strategies to encourage physical activity. Requirements are designed to provide numerous opportunities for activity and exertion, enabling occupants to accommodate fitness regimens within their daily schedule.

6. Comfort: Create an indoor environment that is distraction-free, productive and soothing. Solutions include design standards and recommendations, thermal and acoustic controllability, and policy implementation covering acoustic and thermal parameters that are known sources of discomfort.

7. Mind: Support mental and emotional health, providing the occupant with regular feedback and knowledge about their environment through design elements, relaxation spaces and state-of-the-art technology.

The attractiveness of a work location is largely determined by the presence of green space around it

This includes building design issues such as south facing offices, making best use of attractive views, natural lighting, improved ventilation, drinking water stations, creating break out and relaxation spaces for staff and in some instances the inclusion of health and childcare facilities.

External to the building there is an increasing emphasis on making better use of outdoor amenity areas such as natural spaces for increased biodiversity, sitting and relaxing, or for sports facilities such as running tracks and football courts for exercise. These trends are consistent with the results of Savills What Workers Want survey which found that, generally speaking, the attractiveness of a work location is largely determined by the presence of green space near or around it.

These human-centric design approaches help to attract staff and keep them happy, which in turn drives productivity. As discussed, the sector's growth has meant that some workers who previously worked in other sectors such as office and retail, now work within I&L and demand these types of facilities. While the sector has increasingly become automated it is still very much being driven by people[37].

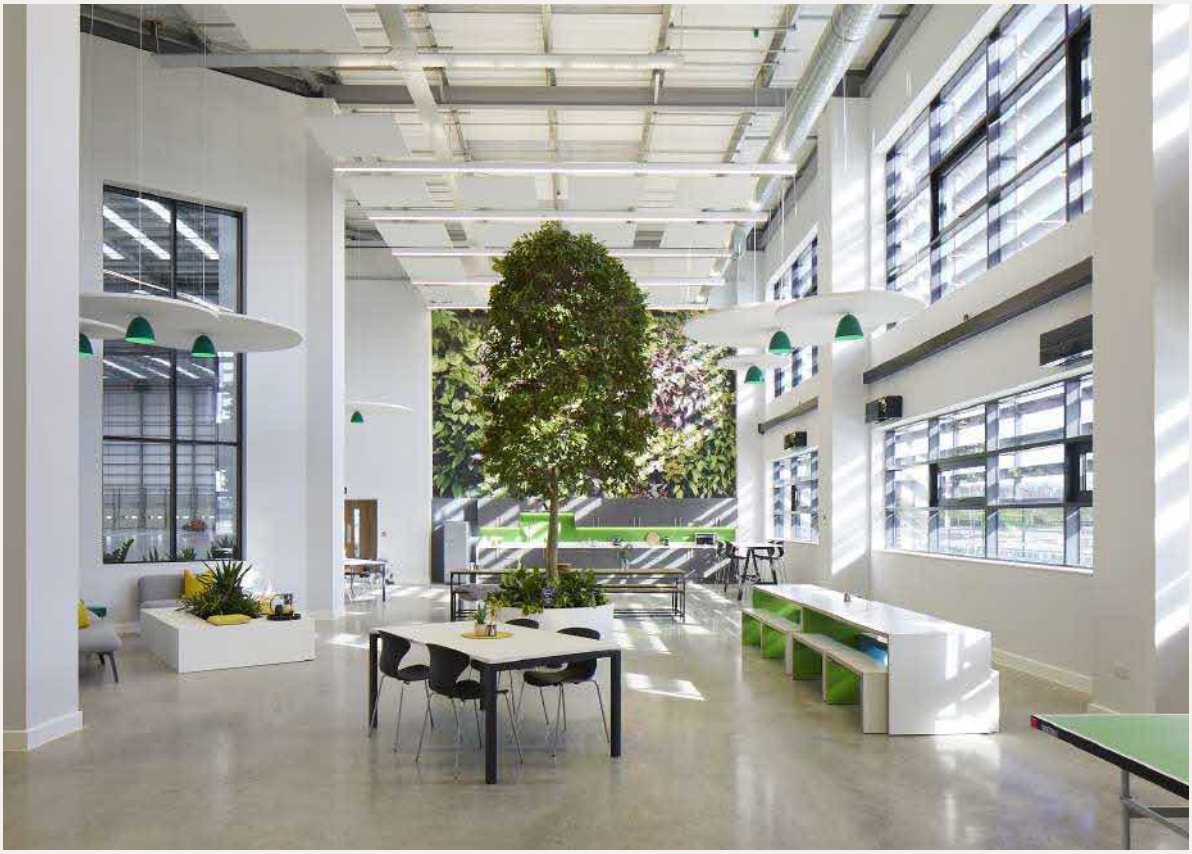
Case Study: Baytree, Dagenham Essex

The scheme is to include a variety of sustainable building features leading to WELL accreditation including external gym equipment, solar photovoltaics linked to battery storage, electric vehicle charging stations, air source heat pumps, enhanced use of recycled and recyclable materials, prefabricated building elements, low energy LED lighting and a super airtight, insulated building envelope, all of which will be constructed within an enhanced landscape environment.

Source: https://www.baytree.com/wp-content/uploads/2017/03/17-03-01-Baytree-commences-first-phase-development-at-its-East-London-....pdf
https://www.chetwoods.com/projects/baytree/

Case Study: DC535 at Prologis DIRFT

DC535 has a living tree as the centrepiece in a light, bright atrium area designed to help employees relax and connect with nature. DC535 also has an employee gym which makes use of natural light, and has a number of green spaces around the building to promote employee wellbeing.



Source: https://prologis.co.uk/wp-content/uploads/2021/01/200226_Prologis_DIRFT_0335.jpg

4. A Green Recovery ‘Boxed’

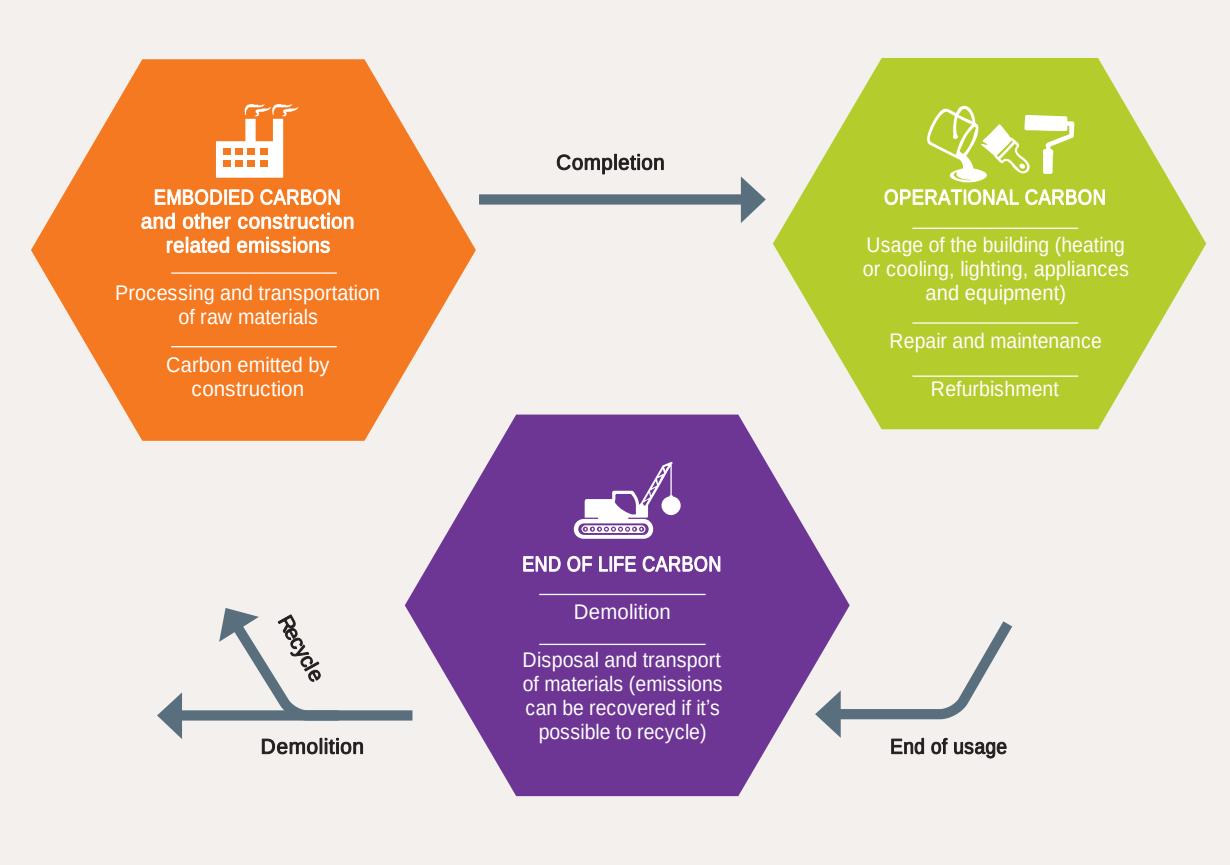
To reduce carbon emissions, interventions have to be made in the construction, operation and demolition of buildings. This is leading to innovations across all phases of an I&L property’s life cycle

The Green Evolution of I&L Premises

In 2019, the UK Government and the devolved administrations committed to bring all greenhouse gas emissions to net zero by 2050, in line with recommendations made by the Committee on Climate Change. However, the Government has subsequently clarified this includes shipping and aviation emissions, which means that the rest of the economy needs to decarbonise much sooner, effectively by the very early 2030s. Reaching net zero greenhouse gas emissions requires extensive changes across the economy, and real estate has a key role to play. Every building has embodied, operational and end of life carbon emissions and the built environment contributes 40% of the UK’s carbon footprint.

This drive to lower emissions is pushing companies to take a close look at the real estate they occupy to make sure it is in line with Government carbon reduction policies. This is driving a range of innovative solutions that improve the environmental performance of I&L buildings. A Savills survey of logistics occupiers found that ‘green/sustainability features’ have climbed from 11th to the 6th most important warehouse feature[38].

The Sources of Carbon Across the Cycle of Property



Source: Savills

Embodied Carbon

It is accepted that in today's world, net zero carbon in construction cannot be achieved without an element of carbon offset, but initiatives are under way to further reduce the embodied carbon in construction, including:

- Design for long life, re-use and flexibility
- Using recycled materials or materials that contain a high level of recycled content
- More elegant, efficient design
- Modern methods of construction, off-site manufacture and design for less material and less waste
- Cement alternatives in concrete
- Alternative methods of concrete production
- Increased use of low carbon products, such as cross laminated timber, in lieu of high carbon materials such as steelwork
- Sourcing materials responsibly and as local as possible, with particular consideration to steel
- Using local workforce
- Liaising with contractors and suppliers to reduce their embodied carbon
- Engineering solutions to reduce imported hardcore to site

The embodied carbon footprint of some typically carbon-intensive materials and components can be reduced by using low-carbon building materials. Using cement replacement in concrete and recycled materials in new warehouse construction delivers significant environmental benefits, including minimising transportation-related greenhouse gas emissions and diverting a large percentage of construction waste from landfill. For example, GLP use GGBS (Ground Granulated Blast-Furnace Slag) in concrete as a cement replacement which reduces the embodied carbon of the concrete as GGBS is a bi-product from the steel industry[39].

Case Study: GLP Magnitude 314, Magna Park

Magnitude 314 is 29,200 sqm warehouse with 1,500 m2 of office area located at GLP's flagship logistics park Magna Park Milton Keynes. The development has been officially verified as the world's first Net Zero carbon for construction in line with the UKGBC Net Zero Carbon Buildings Framework Definition. The building was designed to WELL principles and has achieved both a BREEAM Excellent and EPC A rating. Overall, the design has resulted in a 25.8% reduction in embodied carbon compared to a standard logistics building.

Key members of the building supply chain including material manufacturers and component suppliers were asked to provide a complete breakdown and assessment of the products being supplied including details of their origin, embodied carbon value and whether the product can be reused or recycled. Chetwoods, Thrive and Circular Ecology, along with other leaders in their fields were engaged to help the design team and wider supply chain collaborate and reduce as much embodied carbon as possible.

The building was designed to be flexibly adapted by future occupiers. The roof structural capacity allowed for future installation of Solar PV, once an occupier was in place and their energy load was calculated. Magnitude 314 is now occupied by Royal Mail. The delivery of Magnitude 314 also performed high in social value terms, resulting in over 39% of added social value against a contract value of £12 million. This was well above the expectation of 10-15% of social value delivery for similar construction projects.

Source: GLP

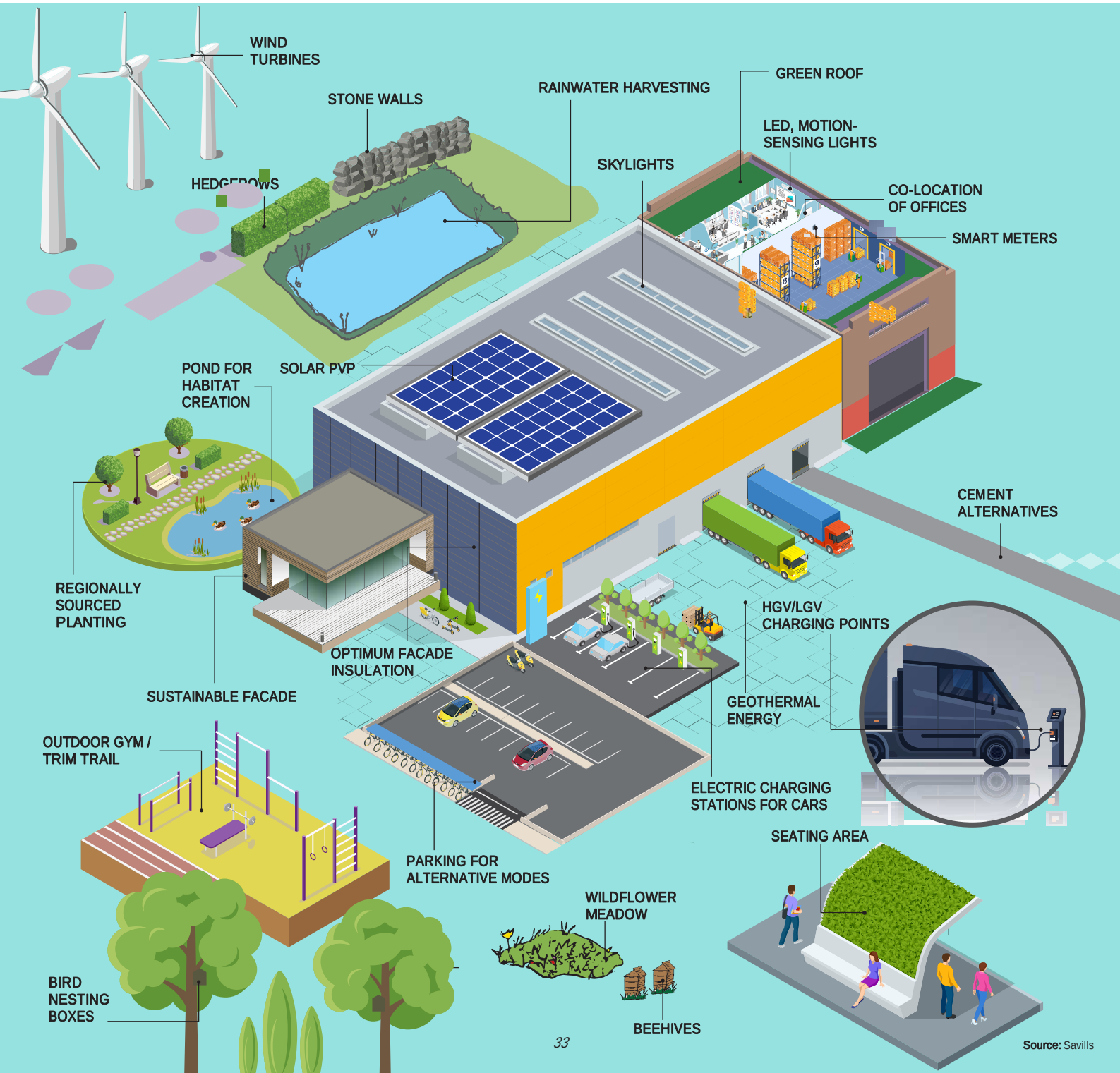
Operations

Energy efficiency during operations can be achieved by addressing both energy demand and energy supply. The former is about reducing the inherent energy demand a building requires to operate, while the latter is about decarbonising the development's energy supply via the use of renewable sources.

The energy demand of large I&L sites has generally been increasing in recent years, driven by growth in certain occupier types such as data centres and cold storage, both of which have heavy cooling demands. This trend is expected to continue over the next decade as we see the increased use of automation and the electrification of transport.

The image below outlines a number of solutions that improve the environmental performance of an I&L building during its operational phase.

The Green Evolution of I&L units



Source: Savills

Lighting is typically one of the largest contributors to a warehouse's energy demand

Reducing Energy Demand

The UK Green Building Council (UKGBC) states that reductions in energy demand and consumption should be prioritised over all other measures prior to implementing on-site renewable energy sources[40]. I&L operators are achieving this in a number of ways.

- **Lighting** is typically one of the largest contributors to a warehouse's energy demand. Below are some popular solutions:

a. Skylights and clerestory windows lower electricity use and associated greenhouse gas emissions and improve indoor environmental quality for warehouse personnel. Skylights avoid light pollution.

b. LED can lower a building's total energy consumption, as well as reduce heat generation. A transition to LED technology can cut consumption between 60-80% compared to other lighting types[41]. LED bulbs also last much longer than all other forms of lighting, which means replacing lighting far less often, resulting in significant cost savings.

c. Sensors, such as motion-sensing lights, as well as sub-meters on machinery, appliances and other equipment. Motion sensors which switch energy-efficient LED lighting on and off as workers move through the space result in a 53% energy reduction from conventional LEDs. For example, all Panattoni buildings include 15% roof lights, and their intelligent lighting systems result in a reduction in electricity consumption by up to 70%[42].

- **High-reflectance roof membranes** such as white thermoplastic polyolefin (TPO) roofing can reduce the building's energy consumption by reflecting more sunlight, with solar gain during the day and loss of heat at night. Benefits include lower indoor temperatures and greater comfort for occupiers, reduced Heating, Ventilation, and Air Conditioning (HVAC) costs, and reduced cost of roof maintenance and replacement.

- **Compounds and chemicals with non-petroleum bases** such as low-emitting sealants, adhesives and carpet systems, also help to conserve non-renewable resources and improve indoor air quality for a healthier working environment.

- **Parking for alternative modes of transportation**, for example bicycle, eScooters and eBikes, EV, hybrid and carpool vehicles, encourages lifestyle choices that reduce carbon emissions and promote health and wellbeing.

- **Smart meters** allow occupiers to track and reduce energy consumption.

Improving Energy Supply

Using renewable energy sources and becoming self-sustainable is increasingly a target for I&L occupiers as it decreases operational costs as well as environmental impacts.

The flat roofs of large I&L buildings are ideal candidates to house solar photovoltaic panels (PV). According to Savills' research and depending on the internal systems, new warehouse development can be nearly energy independent if at least 40% of the roof space is used for PV installation. New development can be designed so that solar PV can achieve a much higher roof coverage. For example Parker Steel's storage facility at Shoreham Port was retro-fitted with around 95% of the roof surface covered by solar PV.

Power resilience is already raised by some occupiers as a growing concern but the full extent of this risk is generally not well understood within the sector. Many organisations overlook the fact that power may not be available at an affordable price without new contract structures or on-site generation. We expect power availability to become a more pressing subject as constraints start to crop up across occupiers' portfolios with the adoption of new technologies that are hungry for electricity, and the roll out of electric vehicles, electric heating and wider decarbonisation.

Distribution Network Operators' (DNOs') strategies tend to respond well to national policy objectives, but lack alignment with local government plans. This can result in a disconnect between where local authorities are planning growth and where DNOs are investing, which can lead to site allocations lacking sufficient energy capacity. This is one area where much more work is needed to align the power grid with opportunities to decarbonise. To this end, engagement in Local Plan making would be welcomed.

While constraints in energy availability can deter development and slow the growth of the I&L sector, they are also pushing developers and occupiers to come up with innovative sustainable solutions to reduce their reliance on the power grid, especially when availability is constrained at peak times. A solution is to decentralise a site's energy supply by building in a private network. This is likely to mean equipping sites with battery storage and on-site energy generation like solar, wind or hydrogen, so that they can more effectively manage on-site demand.

Below are some of the popular solutions:

- **Solar PVP** can be installed on roofs and provide significant energy capacity. For example, DPD's Hub 5 in Hinckley, Leicestershire, has a Solar PV system comprising over 6,000 panels providing an output of 2.4 MW. The power generated by the system enables the hub offices to operate off grid during daytime working hours. Barriers to installation of solar PV will need to be addressed in order to meet net zero targets.

- **Borehole thermal energy storage** stores heat underground during warm months and pumps it back into the building during winter months to meet heating demands.

- **Electric air source heat pumps** also offer a solution to drive down the environmental impacts of buildings. They use electricity to move ambient heat energy into or out of a building's interior, enabling Heating, Ventilation, and Air Conditioning (HVAC) systems to operate without burning fossil fuels.

- In some circumstances, **water source heat pumps** might be attractive where a large water body is nearby and the infrastructure can be installed in the water body without ecological harm.

- **Hydrogen fuel cells** generate power without carbon emissions –the only emission being water vapour – and can be applied to a broad spectrum of transport vehicles including trucks used for distribution and automated forklifts used to shift goods around within I&L facilities. This technology provides improved energy density and allows for significantly longer driving times compared to electric vehicles.

- **Wind farms** offer a source of green energy typically generated off-site. Occupiers can supply their site with this form of renewable energy by choosing energy providers that source electricity from wind farms.

Case Study: DPD, Symmetry Park, Bicester

The 60,000 sq ft hub at Symmetry Park, Bicester is Tritax Symmetry, and DPD's, first 'net zero carbon in construction' building, as regulated by the UK Green Building Council (UKGBC).

Locally sourced A and A+ rated construction materials were used wherever possible, with associated low embodied carbon impact. Timber was also sourced from certified and renewable Forestry Stewardship Council (FSC) approved sources. Low energy and zero carbon design principles were incorporated into the scheme from the start. Reduction in energy demand is achieved using efficient fabric and shading design to reduce heating and cooling demand, and natural daylighting to reduce artificial lighting demand.

The unit also implemented smart energy/building management systems to provide automatic monitoring and targeting of all sub-meters to promote energy management and deliver lower consumption. This measure alone reduced the inherent energy demand of the building by approximately 12%, and the carbon dioxide emissions by approximately 40%. The building design incorporates air source heat pumps for heating and cooling, 5,500 sq ft of solar panels (25% of useable roof area), while the design and building materials used help deliver an 82% improvement in airtightness. The remaining useable roof area is designed to take further solar panels as required by any increase in consumption from DPD in the future, most likely through additional EV charging points. The site also boasts 30 electric vehicle (EV) charging points with ducts provided to the service yard and car park for future installation of further car, van and HGV charging points.

The landscape strategy prepared for the development added to the existing ecological resource through the creation of new habitats interconnected with the existing retained habitats. This included the creation of new seasonal wet areas to enhance the local amphibian population, and to provide an aquatic habitat resource on the Site which was previously not present.

Overall, there was a reduction of 500 tonnes of carbon in the construction process, with the remaining carbon being offset through the use of an accredited tree planting scheme in Northamptonshire with over 1,000 trees being planted. In addition, a wind project in India was sponsored, helping develop renewable energy provision in the country.

Source: Tritax Symmetry

Water Management

Solutions to reduce the use of fresh water include:

- motion-activated faucets,
- rain water harvesting,
- grey water recycling,
- low-flow toilets,
- waterless urinals,
- captured rainwater for irrigation.

Towards Greener Distribution Networks

The sector's drive to decarbonise doesn't stop at its facilities. The largest contributing sector to the UK's carbon emissions at 27% is transport[43]. Even though HGVs and vans account for a smaller share of emissions than cars and taxis, they are still linked to over a third of all road transport emissions. This means that the I&L sector can make a significant contribution to the reduction of the UK's carbon emissions by decarbonising its distribution networks.

Policies such as zero and low emission zones, and the recent Government's pledge to phase out the sale of petrol and diesel HGVs by 2040 are strong drivers for the sector's decarbonisation. Based on Savills research we expect that the commercial sector will transition faster to more sustainable transport than private households. This is due to the increasing costs of running commercial vehicles as a result of policy changes discussed above, which will favour the switch from conventional fuel to EVs or alternative fuels such as compressed natural gas.

Compressed natural gas, although a fossil fuel, is considered a low carbon alternative to diesel and is seen as a stepping stone towards hydrogen. This is because of similarities in the type of engines used and the way the gas is handled.

For example, in 2020 John Lewis Partnership announced that they will convert their 600 HGV fleet to biomethane by 2028. CO2 savings from each truck are estimated to exceed 100 tonnes per year. These gas trucks have also the benefit of being quieter, which is especially important for urban deliveries.

The market for HGV EVs is still in its infancy, given the challenges arising from their large size and the considerable distances they travel. However, EVs can be more easily deployed for last mile deliveries, given their smaller load and the shorter distance travelled. They also contribute to make urban areas healthier, improving air quality and reducing noise pollution.

I&L occupiers are driving this change by increasing the adoption of EVs and natural gas powered fleets.

DPD is building the largest all-electric delivery fleet in the UK, with over 700 electric vehicles operating throughout England, Scotland and Wales. In July 2021 Oxford has become DPD's first all-electric city, meaning that all parcels delivered by DPD in the city are carried by EVs. This move is part of DPD's wider initiative that will see them go fully electric in 25 cities by 2025, backed by a £111 million investment in EVs. The initiative will deliver 42,000 tonnes of carbon dioxide savings for the UK[44].

Amazon has committed to reaching net zero carbon by 2040 and has announced that it is on a path to powering its global operations with 100% renewable energy by 2025. The company has over 500 e-vans operating in the UK and has installed more than 800 electric charging stations across its UK sites, with hundreds more to follow.

UPS is investing in 10,000 electric vans to be rolled out across the UK, Europe and the US between 2020 and 2024[45].

DHL Express has pledged to make any purchase of new courier vehicles electric in order to achieve a 100% electric UK-wide fleet by 2030. The company has also been experimenting across different transport modes. In 2020 it launched its waterborne delivery service on the river Thames in London and is currently exploring the use of fully electric cargo planes for regional deliveries.

Hermes' parent company Otto Group has committed to become carbon neutral by 2030. Hermes is making a move to EVs to deal with parcel pick up and deliveries from the Hermes ParcelShop service. It is also increasing its fleet of compressed natural gas fuelled vehicles, becoming the largest fleet of this kind in the UK parcel sector.

Enhancing Biodiversity

I&L developments are increasingly delivering landscape improvements that enhance the biodiversity of an area. The delivery of 'pocket parks' is becoming more and more popular. These are green spaces that can be found within or adjacent to an I&L development that provide outside relaxation space for workers and can also benefit the wider local community. For example, SEGRO's pocket park on the Slough Trading Estate has bee hives, hard standing for street food and solar smart benches which provide free WiFi and USB and wireless charging. At Prologis Park in Hemel Hempstead, a pocket park has been created by rejuvenating a neglected area of land and turning it into a green community space, complete with footpaths, landscaping and benches which can be used by the adjoining nursery and residents[46].

A development delivers biodiversity net gain (BNG) if it contributes to an overall increase in biodiversity value measured using Defra's biodiversity metric. The Environmental Act sets total BNG requirements at 10% above the pre-development level. BNG can be achieved by delivering habitat creation and/or enhancement on-site, off-site or by purchasing credits. Savills' involvement in a number of I&L schemes has shown that:

- There is a shortage of specialist ecological expertise to advise both developers and local planning authorities;
- There is a need to assess biodiversity earlier in the process than has traditionally been the case;
- All land that is developed, even for landscaping, is considered to be a BNG loss and no account is taken of other benefits, such as land remediation;
- It will be necessary to assess whether additional land should be acquired to support BNG strategies, as on-site delivery of BNG is cheaper than off-site solutions or payments; and
- LPAs will need to develop systems for allowing purchase of credits and to identify suitable BNG land.

The I&L sector needs to adapt to the environmental "damage cost" approach. Some local planning authorities are already requiring 20% BNG and Government has been trialling metrics for assessing air quality impacts and will extend this approach to include other natural capital impacts, such as nitrate neutrality, water and waste.

The sector should participate in Government consultations on how these metrics will impact I&L. Development of greenfield sites in particular will become more complex and costly unless it is possible to commit through the planning process to environmental net gains in both building design and operation.

Case Study: Example of Developer's Sustainability Commitments –St. Modwen

Net carbon reduction

What it is

To help achieve the global goal to stop average temperatures rising more than 2 degrees, the UN wants everyone –from individuals to global corporations and governments –to decrease the damage to our planet.

Why it's important

The building and construction industry accounts for around 40% (UN) of the world's carbon emissions. Government, local authorities, partners and customers have expectations and targets which must be met or exceeded but a global step-change is needed.

How can we help

- Target ongoing carbon reduction at a business unit and group level
- Embrace design principles that deliver long-term, low-carbon and low-carbon enabled buildings
- Integrate carbon reduction into business policies.

Overarching ambition

Be operationally net zero carbon by 2025 and fully net zero carbon by 2040.

Biodiversity & sustainable environments

What it is

Population growth and social trends mean humans are impacting our natural environment in unprecedented ways. From the destroying of distant rainforests to dying out UK insect breeds and the way we all handle waste, change is high on the agenda.

Why it's important

Our company changes the landscapes of both brown- and greenfield sites so we are directly impacting nature and the land around us. We want to embrace making a virtue of a progressive approach to our natural environment.

How can we help

- Boost biodiversity at our schemes
- Make positive use of the community spaces we create to improve biodiversity
- Only use materials from sustainably managed sources
- Reduce waste by maximising product and material use throughout lifecycles.

Overarching ambition

Be ready by the end of 2020 to achieve a net biodiversity gain of at least 10% associated with all development activity.

Health & Wellbeing

What it is

Good physical and mental health is something everyone strives towards in the pursuit of a happy life. A healthy body and mind allow us to enjoy our surroundings, feel good about ourselves and achieve more.

Why it's important

We want to play our part in helping to support a healthier, happier and engaged workforce because it drives sustainable performance. We also have the potential to impact our customers and communities – through places and products – to boost their wellbeing and enrich their lives.

How can we help

- Support wellbeing programmes within our workplace
- Address the wellbeing of communities in all development plans
- Consider and plan for the wellbeing of contractors and partners.

Overarching ambition

Be bold in our pursuit of wellbeing to boost the happiness, health and satisfaction of our people. Make a meaningful, positive impact on the health and wellbeing of the communities we operate in and the places we deliver.

Responsible operating practices and partnerships

What it is

Having the right operating practices ensures that our responsible approach to business is reflected in the way we carry out our business. It also means working with and influencing our supply chain and partners to ensure quality, mutually beneficial outcomes.

Why it's important

We are many times larger than ourselves through the activities we carry out and the supply chain we use. This gives us the chance to positively affect working practices, from payment terms and job creation to education and our impact on the natural environment.

How can we help

- Safety first for ourselves, our partners and our customers
- Establish and maintain a framework for supply chain alignment, ensuring we work with partners to collectively meet our responsible business goals
- Build and maintain positive partnerships and effective stakeholder engagement and communications
- Build and maintain a culture.

Overarching ambition

We can only fulfil our approach to responsible business by working with our supply chain. During 2020, launch a charter to our partners to inspire, set goals and underpin responsible ways of working.

Case Study: SEGRO's Bee Hives

SEGRO have made bee hives a common feature of many of their developments, with over 150 hives across their portfolio. Each hive holds as many as 50,000 bees during the peak harvesting season, and these bees visit over two million plants within a two mile radius, assisting with the pollination of local plants and crops.

Source: https://www.segro.com/esg/case_studies/our-environment/boidiversity?sc_lang=en

End of Life

Demolition and rebuilding are carbon intensive activities. Transport and disposal of the old materials produces emissions and wastes the embodied carbon that went into the construction of a property in the first place. Giving a new use to an existing building typically arises as a response to changing economic conditions, so that declining sectors can make space for emerging ones.

Modern I&L buildings have the advantage to be lightweight structures which are highly adaptable for a large range of uses. Since they are built for production or storage purposes, they are not typically visited by the general public and their lighting and interior design requirements are much simpler.

The lack of solid walls means that internal spaces can be easily reconfigured and readapted to host a diverse range of light industrial, manufacturing and logistics companies with limited capital costs. They can also be repurposed to provide lab space, leisure facilities, data centres and even health facilities. Temporary hospitals were an essential component of the Government strategy to counter the Covid pandemic. Examples include Exeter's Nightingale Hospital built on a former Homebase site in Sowton Industrial Estate and Sunderland Nightingale Hospital built as a conversion of a former industrial building.

A well designed I&L building should also be easy to deconstruct at end of life, making materials available for reuse or recycling. Steel frames used in I&L properties are much more easily recycled than concrete which is more common in other commercial uses. When delivering a new building, the cataloguing of its materials and components make it easier to pinpoint and identify items of value that can be captured for potential reuse at the building's end of life.

5. Final Recommendations

This report has evidenced the need for an improved method to estimate future I&L land demand. It is clear that demand within the sector has been much higher than supply for most of the last decade which has resulted in extremely low availability and exponential rental growth as occupiers compete for limited available stock. In order for the sector to grow to its full potential and generate the jobs and investment the national economy needs, the planning system has to better estimate future land demand. It is recommended that the Savills and St. Modwen 'suppressed demand' methodology is incorporated within the NPPG to help inform Local Plans.

The evidence within this report also supports a number of previous BPF recommendations outlined in its Employment Land Manifesto (July 21)[47] as discussed below.

Recommendation 1 of the Employment Land Manifesto

Introduce a Presumption in Favour of Logistics Development within the NPPG when precise criteria are met, such as:

- **Easy access and proximity to the strategic highway network.**
- **Ability to provide effective access by non-private car to suit shift working patterns.**
- **Located away from residential development/where there is no unacceptable impact on residential amenity to allow for uninterrupted 24 hour working.**
- **Capable of accommodating large scale buildings in terms of both footprint and height.**
- **Sites which suit the future occupier's needs.**

The Local Plan process is too slow to respond to significant market changing events, such as the COVID-induced acceleration in the growth of e-commerce. As evidenced in the 'An Economic Powerhouse' chapter, the planning system has failed to provide a sufficient level of I&L land to meet demand. This has resulted in the national I&L market becoming supply-constrained for the last seven years, as signalled by availability dropping below the equilibrium threshold of 8%, and high rental growth at twice the rate of inflation.

Recommendation 2 of the Employment Land Manifesto

Ensuring Local Plans allocate logistics sites in the right locations to respond to a broad range of market needs.

The optimal location for I&L occupiers allows them to be close to their suppliers as well as their end customers. For this reason, access to the strategic road network is critical, as it reduces transportation time, costs, and carbon emissions. The strategic road network also allows a site to expand their catchment of intermodal freight facilities, which are critical nodes within logistics networks. An optimal logistics site is also in easy reach of a workforce with a range of skills, and is close to worker amenities. It also requires good availability of utilities, services, and broadband. A dialogue between Distribution Network Operators (DNOs) and Planning Authorities should be encouraged to ensure power is supplied in locations where I&L development is being planned. Employment allocations should be in locations that allow I&L operators to work 24/7 without impediments.

Recommendation 3 of the Employment Land Manifesto

Ensuring the industrial and logistics sector is recognised for its focus on ESG: making a valuable contribution to the Government's Green Industrial Revolution and generating social value.

As discussed in the 'Growing Social Value Credentials' chapter, the I&L sector supports large and diverse supply chains which generate significant economic and social value benefits. As the sector continues to expand so will the number of apprenticeships and training opportunities it supports. The sector is also heavily invested in the central and northern parts of the country and therefore is playing as critical role as part of the Government's 'Levelling-Up' agenda.

As evidenced in the 'Green Recovery 'Boxed'' chapter, I&L buildings are delivering on ESG objectives across all stages of a property's life cycle. Reduction in embodied carbon is being achieved in numerous ways, such as via the use of recycled materials, cement alternatives in concrete, and reliance on local labour force. During the operational phase, energy efficiency can be achieved by addressing both energy demand and energy supply. The former is about reducing the inherent energy demand a building requires to operate, which can be achieved in numerous ways (for example, improving lightings, or installing smart sensors and sub-meters; while the latter is about decarbonising a development's energy supply via the use of renewable sources such PV, wind, etc.). Finally, with regards to the end of life phase, modern I&L buildings have an advantage of being lightweight structures which can be adapted for other uses. They can also be easily repurposed or materials can be catalogued to allow for potential reuse in the future.

Recommendation 7 of the Employment Land Manifesto

Introducing an Employment Land Delivery Test to ensure that a commensurate amount of employment land is brought forward to counterbalance housing and that any employment land lost to other uses is delivered in the right locations. If a local planning authority failed to meet the delivery test, a presumption in favour of sustainable logistics development could be engaged.

I&L facilities and their supply chains support the functioning of our economy and the way we live our lives. One of the biggest transformations to our lifestyles in the past 15 years has been the rise of e-commerce. In 2006 online shopping was at 3%, while today this share has grown to 26% and is expected to increase even further. The growth in online shopping has significant implications on future I&L demand given that e-commerce requires over three times the logistics space compared to traditional brick-and-mortar retailers. Population growth is a key driver of this rise in e-commerce as more people mean increased online speeding. Based on Savills future I&L demand estimation, Government housing targets and I&L space requirements per housing unit, we know that about half of future I&L demand will be linked to housing growth. This means that Government should not plan for housing growth without also planning for I&L growth.

Acknowledgements

Commissioning Team

The British Property Federation (BPF) represents the real estate sector, an industry which contributed more than £116bn to the economy in 2020 and supported more than 2.4 million jobs.

We promote the interests of those with a stake in the UK built environment and our membership comprises a broad range of owners, managers and developers of real estate as well as those who support them. Their investments help drive UK economic success, provide essential infrastructure and create great places where people can live, work and relax.

UKWA Limited is the United Kingdom Warehousing Association, a trade association with approximately 900 Members. We represent a sector that is worth £20 billion to the UK economy, has grown by 32% in the past six years, and employs over half a million workers. The Voice of the Warehousing & Logistics Industry, UKWA engages with policymakers, the media and other high-profile stakeholders, to represent the views of our Members. We promote and share best practice and our mission is to help Members operate safely, ethically and profitably, while safeguarding industry standards. UKWA Members benefit from a wide range of valuable services from professional business advice and strategic support to networking opportunities and discounted offers from partnering specialists and associates.

GLP is a leading long term global investment manager and business builder in logistics, data infrastructure, renewable energy and related technologies.

Our combined investing and operating expertise allow us to create value for our customers and investors. In the UK, we have over 33 years' experience in developing best in class logistics units and more than £2.3 billion in assets under management in 42 properties in our operating portfolio with key schemes such as Magna Park Milton Keynes, Magna Park Lutterworth, G-Park Biggleswade and G-Park Doncaster.

Across the United Kingdom, our operating portfolio consists of just under 12 million sq ft in key strategic logistic locations which are leased to blue chip customers such as John Lewis, Royal Mail, Amazon, DHL and Bleckmann Logistics.

We are committed to a broad range of environmental, social and governance (ESG) commitments that elevate our business,

protect the interest of our shareholders and investors, support our employees and customers and enhance our local communities. To learn more about our UK operations, please go to eu.glp.com

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St. Modwen is a property developer focused on logistics, housebuilding and master developing sites. The St. Modwen Logistics business unit develops and manages urban and big box warehouses on key logistics corridors and conurbations. Our Parks serve the needs of customers to expand their businesses, employ local people and support economic growth. Our customers include global logistics and e-commerce organisations as well as significant national and regional enterprises. The Parks showcase the St. Modwen Swan Standard –a set of industry-leading sustainable development guidelines with a focus on responsible building practices.

St. Modwen is committed to ESG, our Responsible Business approach includes a set of ambitious goals in six strategic areas where we can make a sustained difference to society, our stakeholders and the environment: biodiversity and sustainable environments; net carbon reduction; diversity and inclusion; education and future skills; health and wellbeing; and responsible operational practices and partnerships. This includes our aim to be operationally net zero carbon by 2025, and fully net zero carbon by 2040.

Tritax Symmetry is Tritax Big Box REIT's dedicated logistics developer, specialising in delivering best-in-class greener buildings and an unrivalled choice of locations and scale. With offices in London, Northampton and Manchester, Tritax Symmetry has a land portfolio of 4,150 acres, capable of accommodating 40 million sq ft of logistics space.

The company is dedicated to targeting carbon neutrality on the construction of all new buildings. Its commitment to best-in-class sustainable construction methods will give customers the operational advantages they demand. Further information on Tritax Symmetry is available at www.tritaxsymmmetry.com

Tritax Big Box REIT plc is the only listed vehicle dedicated to investing in very large logistics warehouse assets ("Big Boxes") in the UK and is committed to delivering attractive and sustainable returns for shareholders.

Founded in 1987, IM Properties has established itself as one of the UK's largest privately-owned property companies with an enviable track record of delivery across all sectors of commercial real estate.

Originating from the IM Group, the company has developed over 10 million sq ft of commercial real estate becoming renowned in the industry for the consistent delivery of strategically located, award-winning schemes.

Located in the Midlands, the business is focused on a sustainable future in all sectors in which it invests, develops and manages, including offices, logistics/industrial and residential. Our strategic framework centred on People, Planet and Place is pivotal to our future ambitions for responsible development and innovative growth, to ensure both long-term social and economic value to the communities within which we operate, underpinned by strong environmental credentials.

With a customer-focused approach to development, IM Properties is a market leader in quality building design, place-making and sustainable construction, developing schemes for a wide range of clients, including blue-chip customers from across the globe; all delivered with local market knowledge and expertise.

We are an agile organisation that is committed to securing high quality, long-term investments through a fair approach to business. Our management team uniquely combines the skill set and creativity of a property company with the financial resource of a fund which, over its lifetime, has delivered a diverse and high prized portfolio of institutional standard.

Based in Rugby, Newlands Developments is a specialist industrial and logistics developer with a long history of success and sound professional ethos built up over the last 20 years. It's well-known senior management team, who have worked together for many years, have a solid track record and is responsible for delivering over 50 million sq ft of development.

Newlands expertise is centred around taking large, often complex schemes through the planning process and then using an in-house team of professionals and capital to implement infrastructure contracts, often in excess of £100 million. Newlands are bringing forward numerous sites across the country with a concentration of sites in the East Midlands.

SEGRO is a UK Real Estate Investment Trust (REIT), listed on the London Stock Exchange and Euronext Paris, and is a leading owner, manager and developer of modern warehouses and industrial property. It owns or manages 8.8 million square metres of space (95 million sq ft) valued at £15.3 billion serving customers from a wide range of industry sectors. Its properties are located in and around major cities and at key transportation hubs in the UK and in seven other European countries.

For over 100 years SEGRO has been creating the space that enables extraordinary things to happen. From modern big box warehouses, used primarily for regional, national and international distribution, to urban warehousing and light industrial property located close to major population centres and business districts, it provides high-quality assets that allow its customers to thrive. SEGRO's customers include major businesses such as DHL, Amazon, Mars, Royal Mail, British Airways, Brompton Bike, Ocado, Tesco, Netflix, DPD and Equinix that operate in a range of sectors from parcel delivery to ecommerce, retail to TV and film and manufacturing to date centres.

A commitment to be a force for societal and environmental good is integral to SEGRO's purpose and strategy. Its Responsible SEGRO framework focuses on three long-term priorities where the company believes it can make the greatest impact: Championing Low-Carbon Growth, Investing in Local Communities and Environments and Nurturing Talent.

Report Authors

Mark Powney
Director Economics, Savills

Irene Guillet
Associate Economics, Savills

Kevin Mofid
Head of EMEA Industrial and Logistics Research, Savills

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Client team: Sam Bensted (BPF), Gwyn Stubbings (GLP), Ben Taylor (Newlands Developments), Clare Bottle (United Kingdom Warehousing Association), Jonathan Dawes (Tritax Symmetry), Richard Hickman (St Modwen), Neil Impiazzi (SEGRO), David Smith (IM Properties).

Savills colleagues: Toby Green, Emma Andrews, Nick Green, Dan Smyth, Dan Jestico, Thomas McMillan.

Footnotes

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We're a dedicated team with an unrivalled reputation for producing well-informed and accurate analysis, research and commentary across all sectors of the UK property market.

Sam Bensted
Senior Policy Officer
BPF
[redacted]

Mark Powney
Director Economics
Savills
[redacted]

Kevin Mofid
Head of EMEA Industrial and Logistics Research
Savills
[redacted]

Irene Guillet
Associate Economics
Savills
[redacted]

Department for Transport

Future of Freight: a long-term plan

June 2022

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Department for Transport
Great Minster House
33 Horseferry Road
London
SW1P 4DR

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Ministerial foreword

As a free trading, island nation, Britain has always relied on the efficient movement of goods. Our sea ports welcomed wine and timber in the Middle Ages; the world's first steam trains transported raw materials to our factories; and over the past two years, we've delivered vital medical supplies by water, air, rail and road to protect the public against the COVID-19 pandemic.

The scale of our freight and logistics sector is breathtaking. 1.6 billion tonnes worth of goods are transported in and around Britain each year[1]. That's equivalent to around 10,000 fully loaded aircraft carriers. Yet, given much of this is done behind the scenes, we can take the intricacies, organisation, and expertise, that define this sector, for granted. We expect goods to be effortlessly delivered to our front doors from sellers thousands of miles away. We expect our supermarket shelves to be well stocked with global and local produce. We expect the materials that form our houses and infrastructure to be readily available. Yet what we don't often see are the more than 2 million workers employed by the wider logistics sector[2], from HGV and freight train drivers, pilots and ground handlers at airports to seafarers and those staffing our distribution centres, all of whom work night and day to make it all happen. In short, they power our economy and deliver the quality of life we want and need.

Our most pressing national priorities: from building back after the pandemic and levelling up, to reducing our greenhouse emissions, all rely on the freight sector. Freight contributes £127 billion to our economy each year, whilst supporting £400 billion in manufacturing sales[3]. In fact, the number of freight and logistics jobs have grown by 26% since 2010[4], nearly double the rate of the wider economy. Many of our hub ports are in Britain's traditional manufacturing heartlands – the very areas that, for decades, have been starved of investment. And given HGV and domestic shipping freight are responsible for over 20% of our domestic transport carbon emissions[5], it's imperative we adopt new technology to help freight go green.

Transporting goods has never been more reliable, low cost and quick. However, the sector must face up to future challenges to ensure it remains cost efficient, resilient and valued by society. These challenges range from obtaining planning and land allocation to serve local communities, growing the pipeline of talent so that the future of the sector is secured, and harnessing technology and data to meet future rising demand.

This Future of Freight Plan is government and the sector's joint response to these challenges. It reflects the growing importance of freight; until now, there has never been a cross government and cross modal plan for the sector. The Plan outlines the changes we're making across five key areas.

1. We will identify a National Freight Network (NFN) across road, rail, maritime, aviation, inland waterway and warehouse infrastructure. Our long-term aim will be to remove the barriers which prevent the seamless flow of freight.

2. A new open and honest relationship will be forged with the sector to collectively assess its future energy and fuel needs through a Freight Energy Forum. We want to support the entire sector in its transition to net zero by 2050.

3. We will also undertake a planning call for evidence to explore planning reform opportunities. Because, freight needs to, above all, serve the interests of local communities across the country.

4. Work has already begun on the forthcoming 'Generation Logistics' campaign to reset the sector's image and raise awareness of the breadth of career options across freight and logistics. In addition, we'll work with the sector to strengthen our longer-term employment and skills offer. to reset the sector's image and raise awareness of the breadth of career options across freight and logistics. In addition, we'll work with the sector to develop a longer-term employment and skills offer.

5. Finally, by connecting the sector to innovators via a dedicated £7m Freight Innovation Fund, we will maximise the use of technology and data across freight and logistics.

All this will be overseen by a refreshed Freight Council model, holding the government and sector to account on the delivery of these commitments over coming years.

Moving goods efficiently has underpinned Britain's historical growth, prosperity and global influence. In today's increasingly interconnected and competitive global economy, we need a world beating freight and logistics sector that will deliver the greener, fairer, and stronger economy we need. A sector that will help build a truly Global Britain.

Trudy Harrison MP,
Parliamentary Under Secretary of State

Executive summary

Why a Future of Freight plan and why now?

Every day millions of deliveries are made in the UK. Every parcel received at a front door, every good purchased in a shop and every component delivered to a factory was delivered by the UK's world-class freight and logistics sector. It is a vital pillar of the UK economy, contributing £127 billion gross value added (GVA) through more than 200,000 enterprises[6]. The sector enables UK prosperity, health, wellbeing and security by maintaining the smooth flow of goods into, out of, and across the country.

This Future of Freight plan comes at a pivotal time for the sector. It is emerging from the operational challenge of the COVID-19 pandemic and the transition to a new relationship with the EU whilst managing the impacts of the Russia-Ukraine war and longer-term implications for the global free-trade system. As well as managing the issues of today it must also look to the future and to meeting the opportunities and challenges of the transition to net zero, ensuring it has the right skills and people, changing consumer trends, and new technology.

Freight and logistics has a key role to play in the delivery of a number of public policy outcomes. The sector can make a significant contribution to **levelling up** and **strengthening the union** as a geographically distributed employer supporting economic activity across the UK. And the sector is the gateway for UK plc to imports, exports and global markets, making it is central to **strengthening the UK's global impact .**

To achieve this government and the private sector must work together in partnership. The Future of Freight plan builds on an enhanced partnership between government and industry, consolidated through Brexit preparations and pandemic response and culminating in the establishment of the Freight Council[7], to jointly set direction and strategic priorities for the sector. This plan marks a step-change in collaboration between the sector and government, with a jointly agreed **vision**, set of **priorities**, **actions**, and **themes** to meet the challenges and opportunities of the coming years.

This plan does not seek to cover every aspect of freight and logistics but builds on engagement with industry to identify key priorities with an initial set of proposals. It's intended that this plan is a milestone in and ongoing partnership for the years to come, with future opportunities for course-correction. Delivering on our vision, priorities, actions, and themes will be a gateway to a stronger sector and a stronger UK.

Vision

This plan sets out a starting point for government-industry collaboration going forward and states our shared vision for the sector . The plan establishes government and the sectors joint ambition and commitment to a long-term, cross-government and cross-modal approach to delivering our vision of:

A freight and logistics sector that is cost-efficient, reliable resilient, environmentally sustainable and valued by society.

Cost efficient	Supporting the sector to deliver globally competitive costs and support the broader UK economy with access to low-cost good tranport.
Reliable	Facilitating the sector delivering consistently good per-formance for its customers, providing reliable access to the goods that businesses and consumers need.
Resilient	Bolstering the freight network's capacity to anticipate absorb, resist or avoid disruption and recover when disruption does occur. Maintaining the smooth flow of goods thorughout.
Environmentally sustainable	Achieving a net zero freight and logistics sector by 2050, whilst supporting broader environmental objectives of air quality and noise reduction.
Valued by society	Ensuring freight is valued by the public and decision makers across sectors reflecting its critical importance to the wider economy, and the lives of everyone in the UK.

By focusing on this vision in the medium and long-term, industry and government can deliver the strong, efficient, and green freight sector that will power UK economic wellbeing and global influence for decades to come.

Themes

After consulting extensively with industry partners this plan also has two themes that inform the delivery of the priority actions. A mutual focus on **raising the status of freight** and embedding a **multi-modal approach** to freight across government.

Priority areas and actions

Engagement with industry has tested how best to jointly deliver this vision. Government and industry have agreed that the most urgent challenges are in five priority areas and have committed to delivering actions for a stronger future for freight in each of them.

A National Freight Network (Chapter 3)

Challenge: Lack of visibility and understanding of the freight network as a cross-modal system by the sector, government, and freight end-users limits joined up decision making in the public and private sectors.

Goal: Government and industry collaboration securing a system-level approach to the freight network supporting end-to-end freight journeys that are more efficient, reliable and resilient. Full consideration of the role of freight in strategic infrastructure investment and planning. Maximising opportunities for modal shift to make use of capacity in the freight system.

Announcements: Government and industry will deliver this by:

- Improving our understanding of the domestic freight network, including considering the need to identify a National Freight Network;
- Undertaking valuation of freight sudies to improve methedologies for analysing the impact of freight;
- Improving the visibility of freight in infrastructure planning; and
- Supporting modal shift.

Transition to Net Zero (Chapter 4)

Challenge: A cleaner, greener freight system will deliver opportunities, including cutting emissions and supporting high-quality green jobs. The freight and logistics sector has opportunities to lead the world in developing and rolling out zero emission solutions for freight, gaining global first mover advantages in some of the most challenging areas. Continuing to invest in long-life assets can be difficult whilst there remains some uncertainty around the precise mix of technologies and the delivery of associated energy infrastructure that will be needed. Working together, industry and government will need to quickly build confidence in energy infrastructure and decarbonisation pathways in order to accelerate the deployment of zero emission technologies.

Goal: Government and industry collaboration to enhance investment certainty and to harness cross-modal efficiencies and synergies as the whole sector transitions to net zero.

Actions: Government and industry will deliver this by:

- Establishing a Freight Energy Forum to build confidence in the transition by;
- supporting and promoting modal shift and exploring geographic disparities in coverage of energy infrastructure;
- Undertaking a regulatory review of barriers to delivery of zero carbon energy infrastructure; and
- Maximising the potential of modal initiatives by demonstrating a zero-emission cross-modal freight journey.

Planning (Chapter 5)

Challenge: A disconnect exists between industry, that is not equipped to properly engage with planning processes, and local planning authorities, that are unable to understand the needs of a changing an innovative freight and logistics sector. This this leads to increased complexity, cost and time for promoters bringing forward schemes that are in the national interest. This this leads to increased complexity, cost and time for promoters bringing forward schemes that are in the national interest.

Goal: A planning system which fully recognises the needs of the freight and logistics sector now and in the future and empowers the relevant planning authority to plan for those needs.

Actions: Government and industry will deliver this by:

- Collaborating to support a programme of engagement with local planning authorities;
- Reviewing and amending Planning Practice Guidance;
- Publishing a freight specific call for evidence to understand what is working well and what requires improvement in planning;
- Engaging with a consultation on updated guidance for Local Transport Plans;
- Engaging with the review of National Networks National Policy Statement; and
- Engaging with the Department for Levelling Up, Housing and Communities programme of changes to the planning system.

People & Skills (Chapter 6)

Challenge: Immediate and future skills shortages across the sector could undermine resilience of UK supply chains. There is a need to: Produce a pipeline of talent across the freight sector by improving the training and employment options; addressing awareness and negative perceptions of the industry; and promote the availability of attractive, fulfilling jobs at all levels of the industry.

Goal: The freight and logistics sector is seen as an industry of choice for talented, diverse, and skilled people at all stages of their career, so that the sector can meet the demand for the distribution of goods to, from and in the UK.

Actions: Government and industry will deliver this by:

- A Generation Logistics communications campaign in 2022;
- Collaborating to ensure the Transport Employment and Skills Taskforce meets the future skills needs in freight and logistics; and
- Collaborating to deliver a programme of employer engagement and reforming the Freight and Logistics training offers to encourage transferable qualifications.

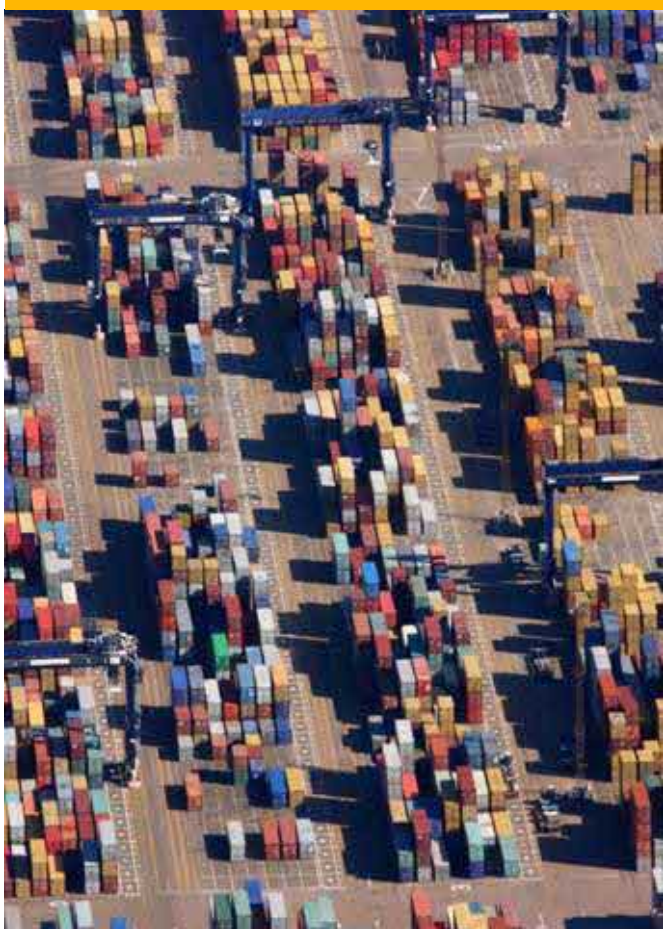
Data & Technology (Chapter 7)

Challenge: There is limited awareness in the sector of innovative solutions coming to market, and of the sector's needs amongst innovators. There is also an incomplete understanding amongst industry and government of viable technologies' ability to meet real-world freight problems.

Goal: Greater awareness of the sector amongst innovators and greater sector awareness of innovations. Accelerating the adoption of currently available solutions within the sector and developing the future pipeline in line with real-world needs.

Actions: Government and industry will deliver this by:

- co-designing a new dedicated £7m cross-modal Freight Innovation Fund;
- Collaborating to develop the future pipeline of research and solutions to meet the sector's real-world requirements;
- Establishing an innovation sub-group of the Freight Council to build awareness of the sector to innovators and boost innovative solutions uptake in the sector.



A new dedicated £7m cross-modal Freight Innovation Fund

1

Freight and Logistics

World trade volumes have grown

4 10 0 %

between 1950 and 2020

The freight and logistics sector

1.1 The multi-modal freight and logistics sector is critical to every supply chain into, across and out of the UK and is fundamental to our economic wellbeing. The Chartered Institute of Logistics and Transport has developed the 7Rs to define logistics: *getting the Right product, in the Right quantity, in the Right condition, at the Right place, at the Right time, to the Right customer, at the Right price*. Freight is the purely transport component of logistics moving goods across a multi-modal global network of road, rail, air, and maritime routes. Most supply chains rely upon multiple modes of transport and transfer between modes takes place at ports, airports, rail freight interchanges, and warehousing where freight is disaggregated or consolidated for onward transport, ultimately to the end customer.

1.2 The demand for freight and logistics is a derived demand from the needs of trade – whether international, national or local – to move goods through supply chains from raw materials to refined products and onto the end consumer. World trade volumes have grown 4100% between 1950 and 2020, while the value of trade has ballooned by almost 300 times from 1950 level[8]. The freight and logistics sector has grown alongside and today is one of the largest economic sectors globally, worth $8.6 trillion in 2020[9].

This growth means that the largest companies in the freight and logistics sector are amongst the world's largest companies. UPS has a market capitalisation of $162 billion[10], Maersk, the world's largest shipping line, is $364.76 billion[11], and Kuehne & Nagel – a large Swiss third party logistics company (3PL) –is $31.5 billion[12].

1.3 The UK is a trading nation with imports and exports comprising 62.9% of GDP, higher than the global average of 56.3% in 2019. We are, therefore reliant on the freight and logistics sector for our economic wellbeing[13].

1.4 In the UK it is estimated that the sector contributes 10% of the UK non-financial business economy and £127 billion gross value added (GVA) through more than 200,000 enterprises[14]. The World Bank Logistics Performance Index ranks the UK highly, at 9th globally, using a range of indicators including quality of infrastructure, efficiency of clearance processes, competence of logistics services, and the timeliness of shipments reaching destination[15].

1.5 The UK freight and logistics sector is operated by private sector companies who invest in infrastructure –ports, rail terminals and airports –and equipment –trucks and rolling stock –without government support. The public sector invests in the road and rail network that is used by freight transport operators.

1.6 As an island the UK is particularly reliant upon its international aviation and maritime freight connectivity and the efficient transfer of goods at ports and airports onto domestic road and rail freight modes. The country is well connected to global maritime and aviation networks. These networks are complex. The UK imports/exports 95% of goods by weight through maritime ports[16]. In contrast, in 2017 air freight represented less than one percent of UK international freight by tonnage, but by £ value 49% of non-EU exports and 35% of non-EU imports were carried by air[17]. Fig 1.1 shows freight volumes into the UK's major ports and airports, with detail of freight types for arrivals in ports and the mix of bellyhold and dedicated air freighter arrivals to UK airports. The smooth flow of freight is also facilitated by high-quality border operations. The *2025 UK Border Strategy* (2020) recently set out government's goal to deliver the most effective border in the world, including plans to deliver a Single Trader Window (STW), Advanced Risk Analytics (ARA) and Ecosystem of Trust (EoT) to support flows of freight.

The UK imports/ exports

95% of goods

by weight through maritime ports

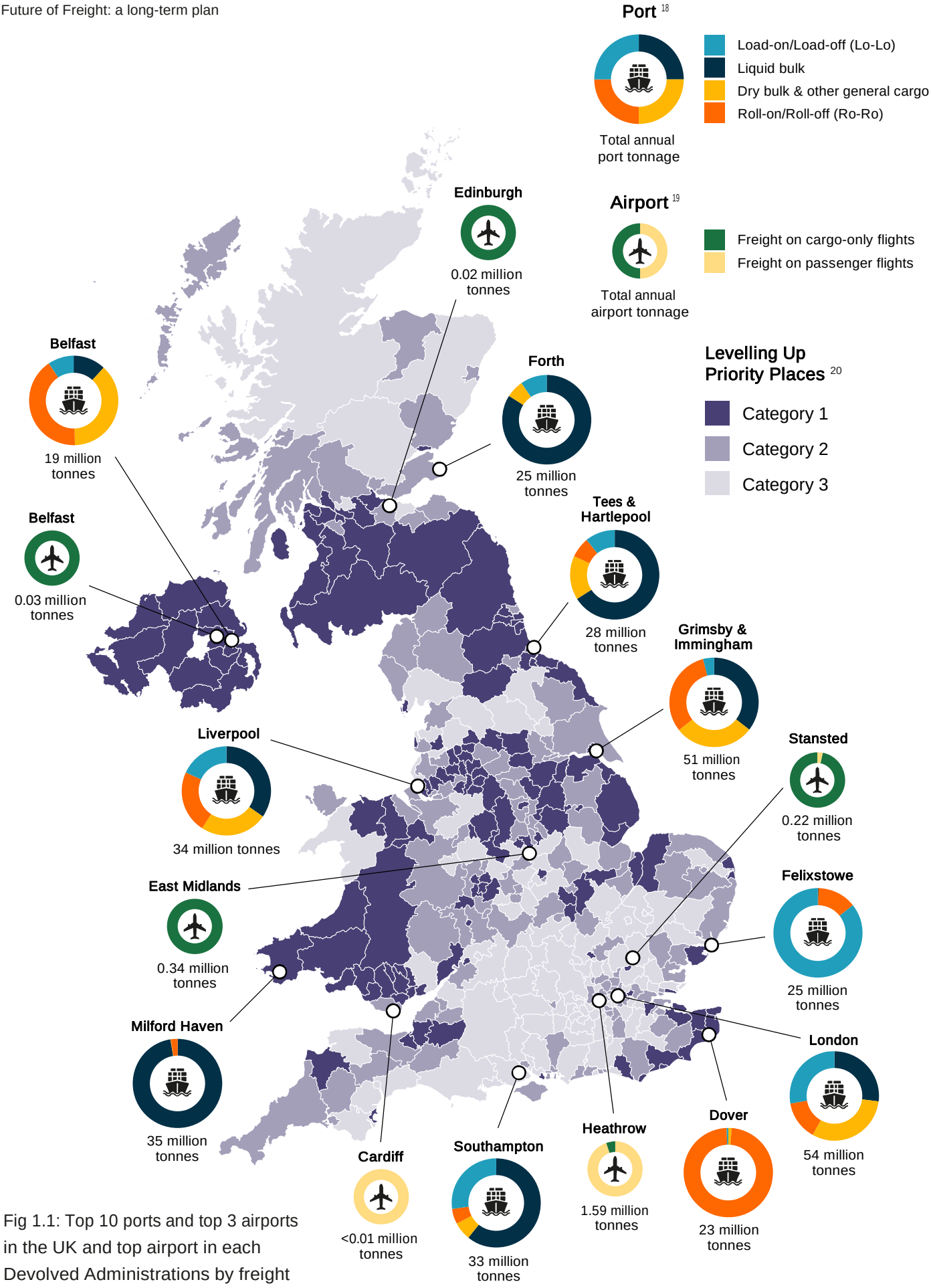


Fig 1.1: Top 10 ports and top 3 airports in the UK and top airport in each Devolved Administrations by freight tonnage (2019), alongside UK government Levelling Up Priority Areas.

1.7 Air freight is an excellent example of how aviation is key for the UK in supporting our global ambitions. It played a critical role during the pandemic, delivering vital PPE throughout the crisis and helping to maintain our international and lifeline distribution networks. Building on this success, the air freight sector continues to be a key enabler of international trade, playing an integral part of the future success of the UK economy.

1.8 Air freight is moved either in the bellyhold of passenger aircraft or in dedicated air freighters and because of cost is typically either high value or time critical goods. Air freight is critical to some high value add industry supply chains, such as advanced industrial manufacturing and pharmaceuticals. In the UK bellyhold freight is dominant and is almost exclusively long-haul, because the business models of short-haul low-cost airlines with fast turn arounds do not support air cargo. Heathrow Airport handles over 60% of all UK air freight by tonne because of its extensive long-haul passenger network with 35 destinations served at least weekly in North America, 17 in East Asia and 12 in South Asia[21]. The UK's largest airports for dedicated air freighters are East Midlands International and Stansted airports that handle a further 22% of the UK's air freight[22]. More than 80% of UK air freight is handled by these three airports.

1.9 The UK's airport, airfield and aviation infrastructure network supports freight movements, acting as a catalyst for national and local benefits. Regional airports also provide vital freight movements for the nations and regions of the UK, from Birmingham Airport to Belfast International which hosts the important nightly Royal Mail operations. In Scotland, the air freight network is used extensively for time-sensitive critical goods such as supplies to the Islands. Some airports, like Bournemouth Airport, are diversifying their operations to facilitate more trade by expanding their cargo operations and are now handling over 15,000 tonnes of freight in 2021[23]. Looking forward we will continue to update and improve the UK's already extensive portfolio of Air Service Agreements; enabling international connectivity and breaking down market access barriers in the air cargo sector, giving operators commercial and operational flexibility.

1.10 Maritime freight is very varied. Roll-on/roll-off (ro-ro) ferries carry high-value consumer goods on routes from the EU to the UK and from England and Wales to Northern Ireland[24]. Bulk carriers transport crude oil, refined petroleum products and liquid natural gas as well as biomass, agricultural products, and commodities such as steel. Deep sea container shipping services transport goods between the UK and the rest of the world, supported by short sea services to near neighbours in NW Europe and the Baltic and coastal services transporting containers

from large container ports to smaller regional ports. The UK is fortunate that the large container ports in southern England –Felixstowe, Southampton, and Thames Gateway –are on heavily served routes from China and the Far East to NW Europe. The UK benefits from port calls by the largest container ships as they head for Rotterdam, Antwerp and Hamburg. Fig 1.2 shows how goods from China travel by ship to the UK. Ships call at ports on route allowing shipping lines the flexibility to manage flows within their contractual agreements, while individual containers may be transhipped at specialist hubs in Dubai or Singapore or at other ports on route .

1.11 International rail via the fixed link between Folkestone and Coquelles, provides another route for ro-ro (Eurotunnel shuttles), containerised and bulk rail freight to enter and exit the country. International rail freight, which carries goods to inland locations helps to reduce pressure on short straits ports and the road network through modal shift. International rail freight through the Channel Tunnel has also played an important role in key supply chains such as automotive manufacturing, supermarket goods and steelmaking, providing a resilient, more sustainable alternative means of transport in and out of the UK.

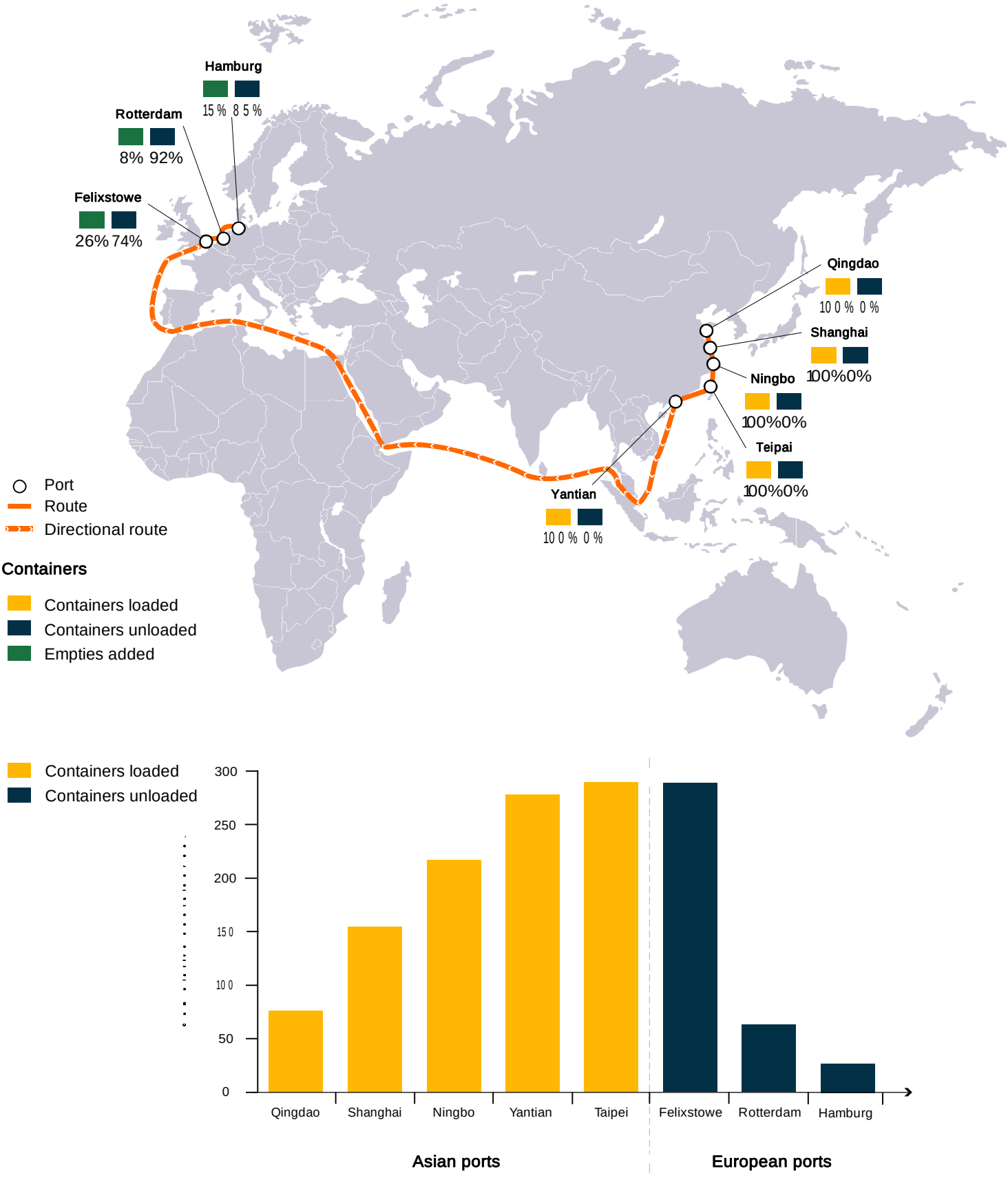


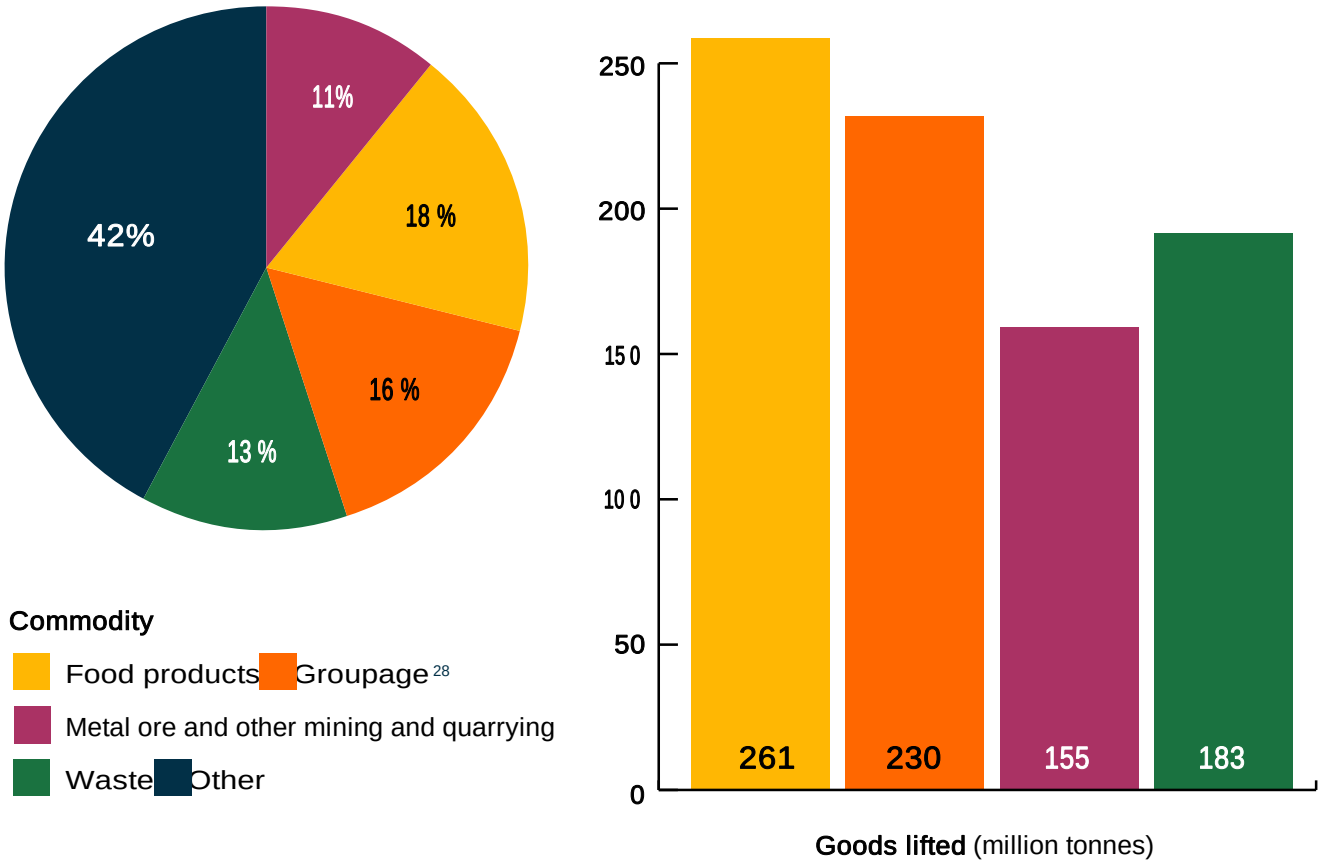
Fig 1.2: Example journey for UK bound container ship

1.12 Goods are typically moved from ports by road and rail to National Distribution Centres (NDCs) which act as medium-term storage (average 4-6 weeks) for international and domestic sourced goods. A concentration of NDCs is found within the Golden Triangle in the midlands which is centrally located to support ports, domestic suppliers and onward transport to Regional Distribution Centres (RDCs). RDCs re-distribute goods to retail outlets and direct to homes and typically have much shorter dwell times –distribution frequently takes place within 24hrs. Warehousing across the UK and its road and rail connections shows how goods move through the network, frequently using more than one mode of transport.

1.13 Between distribution centres and goods destinations road freight transport dominates. It is flexible, cost effective, has low barriers to entry and it has a low level of regulatory complexity. 45% of road freight lifted is transported by vehicles operated by the owners of the goods including retailers and some manufacturers. The majority 55% is carried for “hire and reward” by operators contracting with customers for specific consignments or as a part of a long-term commercial relationship[25]. In total 289,000 people were employed in the sector across nearly 59,000 enterprises contributing £13.6 billion to the economy[26]. Fig 1.3 shows how just four commodities categories comprise nearly 60% of road freight by goods lifted tonnes.

Road

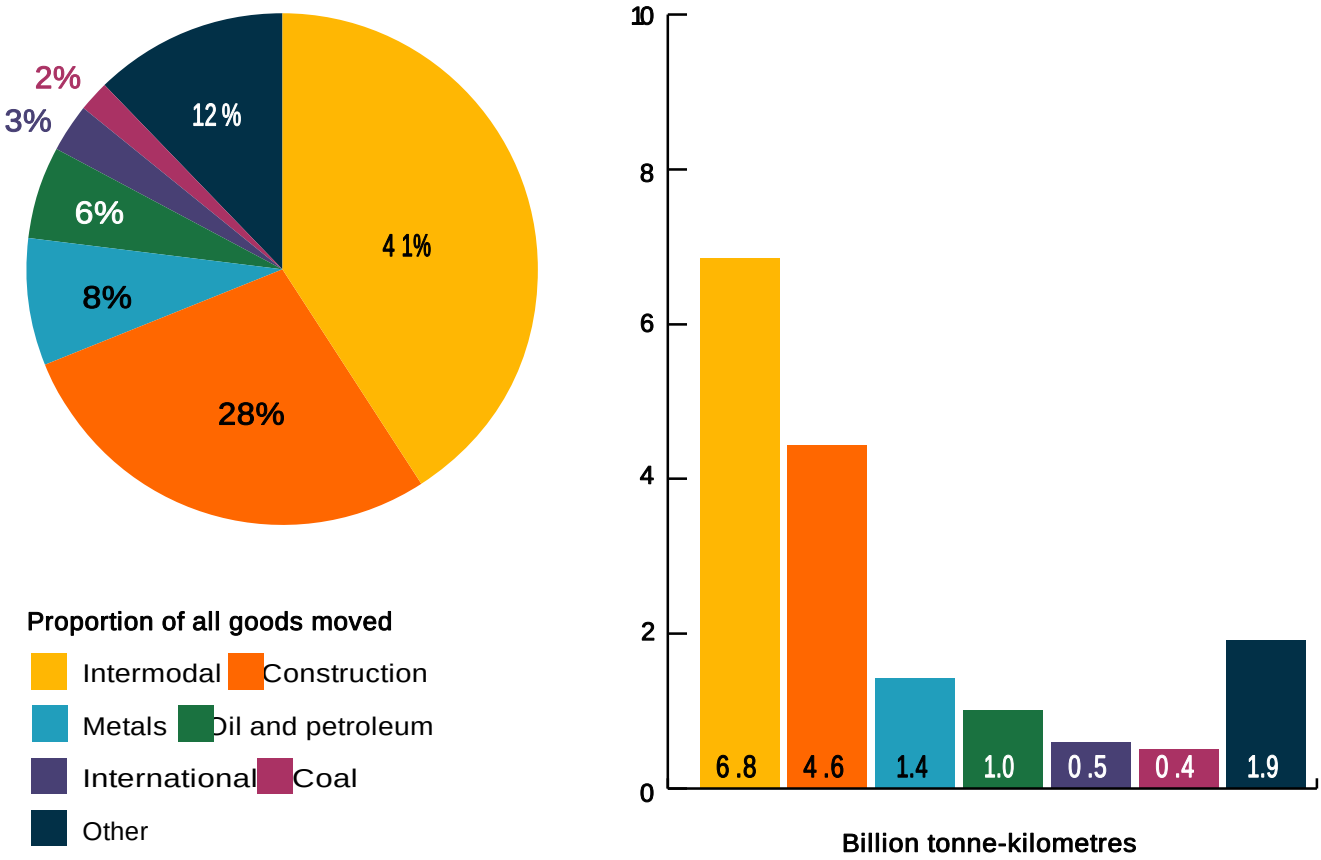
Fig 1.3: four road freight most common categories of commodities carried, 2019[27]



1.14 Rail freight is largely privately operated and freight operating companies (FOCs) compete for custom and can be divided into a variety of services. One main area is bulk rail freight, which tends to carry large volumes of consumer goods, as well as heavy goods, either from domestic locations such as stone from quarries or from ports moving imported steel, gypsum or biomass. The other main area includes non-bulk rail freight, which is typically intermodal, where higher value cargo is carried in a container between intermodal terminals such as a deep sea port and inland rail freight interchange. Where it may then be either warehoused or moved to HGV for onward distribution by road. Intermodal cargo can range from imported consumer goods, food –imported and domestic, business to business equipment and intermediate products.

Rail

Fig 1.4: Rail freight movements by commodity 2019/20 (ORR statistics)[29]



1.15 Fig 1.4 shows the commodity mix of rail freight today. In recent years, the biggest shift in demand for rail freight has been from low value bulk to higher value intermodal rail freight. This has been driven by the big drop in demand for the transport of coal. As recently as 2013, 8.1 billion tonne-kilometres of coal was transported comprising 35% of all rail freight, Today that has dropped to only 0.2 billion tonne-kilometres or just over 1% of all rail freight[30]. Rail freight is modelled to have resulted in 6.4 million fewer lorry journeys in 2019/20[31], reducing congestion on the road.

Rail freight also includes important Anglo-Scottish movements, moving containers from ports and inland terminals in England to the central belt of Scotland, reducing pressure on UK roads. New research, recently commissioned by the Rail Delivery Group, highlights the positive contribution being made by the rail freight sector based on the distribution of freight across varying geographical locations in the UK. The value of freight report also estimates that rail freight delivers economic benefits of around £2.45bn per year, many of which are dispersed across the Midlands, Northern England, Scotland and Wales[32].

1.16 The complexity of modern supply chains and of the global and domestics freight systems has in recent years driven: firstly the development of third party logistics providers (3PLs), that provide supply chain management including inventory management, warehousing and fulfilment (often road freight transport); and more recently fourth party logistics providers (4PLs) that integrate the services of multiple 3PLs to manage the clients supply chain. For international trade freight forwarders contract with a carrier or multiple carriers on behalf of the shipper to move goods from one country to another using ships, planes, trucks and railways and multiple modes for a single shipment. Freight forwarders help to manage the customs and other documentation required for import, export and transhipment.

1.17 This multi-modal integration of services underpins this plan's approach to freight as a complex multi-modal system rather than as separate individual modes.

2 Objectives and scope

Government and industry commitments

Government and the freight and logistics industry have collaborated in the development of this plan . Together we will continue to collaborate to:

- Achieve our vision for the sector
- Implement the priorities identified in the plan
- Ensure government and industry action reflects evolving opportunities and challenges

Objectives of this plan

2.1 In this long-term and cross-modal Future of Freight plan, the Government and the privately-owned and operated freight and logistics sector state their joint ambition to build on the strong foundations established in Whitehall and across industry to develop, for the long-term, a freight and logistics sector that is **cost efficient, reliable, resilient, environmentally sustainable and valued by society**. By working together towards this shared ambition, the government and industry will support millions of supply chains across the country that depend upon the sector to deliver the food, medicines, energy and consumer goods that we both need and enjoy.

The UK's ten largest ports handle more than

300m tonnes of freight each year

2.2 This plan is an important milestone in a long-term reset for the status of freight and logistics. This is the start of a new holistic, cross-sector and cross-government approach to driving efforts to meet long-term challenges for the sector. Supported by a sustained raised profile, clear structures, and clear deliverables.

2.3 **Cost efficient:** It is estimated that in the UK the freight and logistics sector is supporting nearly £400 billion in manufacturing sales across the UK and globally[33]. To succeed in the global economy it is essential that the freight and logistics costs of business are competitive.

2.4 **Reliable:** 95% of UK imports by volume arrive by ship and the UK's ten largest ports handle more than 300 million tonnes of freight each year[34]. The UK's heavy goods vehicle (HGV) fleet lifted 1.39 billion tonnes of freight and moving a total of 152 billion tonne kilometres in 2020/21[35] with rail freight lifting a further 69 million tonnes and moving a total of 15.2 billion tonne kilometres[36]. The supply chains relying upon this huge volume of goods need consistently good performance from our freight and logistics system.

2.5 **Resilient:** Day-to-day reliability must be complemented by resilience in the freight and logistics system. Specifically, the systems' capacity to anticipate, absorb, resist, or avoid disruption and to recover when it does occur. Manufacturing and retail manage inventory carefully to remain competitive and a resilient freight and logistics sector is critical to this.

2.6 **Environmentally sustainable:** In 2019 HGVs contributed 16% of domestic transport Green House Gas (GHG) emissions and the domestic maritime sector contributed a further 5%[37]. Rail freight is on average 76% more GHG efficient per freight tonne km than road freight[38]. By 2050, the freight and logistics sector must achieve net zero while continuing to support wider environmental ambitions including air quality and habitat preservation.

2.7 **Valued by society:** A successful freight and logistics sector is necessary to support our modern way of life. Despite the recent high profile of freight and logistics during the COVID 19 pandemic, a recent industry survey showed only 48% of the public are thinking more about how goods are transported and delivered and only 24% of the public are confident they could describe how an item of clothing got from where it was made to their home or shop[39]. Freight will be valued by the public and decision makers across sectors in a way that appropriately reflects its critical importance to the wider economy, and the lives of everyone in the UK.

2.8 These objectives apply to the whole cross-modal freight system. From international gateways through long-haul distribution by road and rail to urban and last mile distribution. Each priority and action identified in this plan will raise the performance of freight and logistics as a whole.

2.9 Focusing on these objectives in the medium –and long-term will support the supply chains that provide for our economic wellbeing. **Each priority identified in this plan is tested against these objectives**. Objectives must be considered both individually and collectively, recognising the potential for positive and negative feedback loops between them. A more resilient freight and logistics sector could be less cost efficient, but one that has effectively and efficiently decarbonised is likely to be more financially resilient.

How a strong Freight and Logistics sector supports wider objectives

2.10 In addition to these shared objectives the government is also keen to take opportunities to support wider strategic priorities that a successful freight and logistics sector will provide.

2.11 **Levelling up:** *Levelling Up the United Kingdom* (2022) set out the government's ambition to end the geographical inequality in the UK beginning by improving economic dynamism and innovation to drive growth across the whole country[40]. In the freight and logistics sector, activity is more geographically dispersed than other service industries that agglomerate in cities with concentrations of skilled workers, capital, customers, and transport connections. The largest and most important freight hubs –maritime ports and airports, warehousing and distribution centres, and rail freight interchanges –in the UK freight network are more likely to be situated in former industrial heartlands and coastal towns. Fig 2.1 shows the location of ports and large freight airports against the government's priority areas for levelling up.

2.12 The freight and logistics sector is ideally placed to support levelling up. It is already a major contributor to economic activity, productivity, and employment across the whole of the UK and this contribution is growing. Since 2010, the number of jobs in transport and storage has grown by 26% compared to only 14% across the whole economy[41]. There is increasing sophistication of roles in the sector with Professional and Associate Professional and Technical roles increasing by 331,000 since 2010[42]. Meanwhile in 2021, the number of UK businesses classified as transport and storage was 88% higher than in 2011, with fastest growth in the Midlands, East of England, Yorkshire and The Humber[43].

2.13 Freeports will bring together ports, local authorities, businesses, and other key local stakeholders to achieve a common goal of shared prosperity and opportunity for their regions. Freeports will be national hubs for international trade, innovation and commerce, regenerating communities across the UK, by attracting new businesses, spreading jobs, investment and opportunity to towns and cities

up and down the country. Eight new freeports were announced in the Spring Budget 2021 which were East Midlands (centred around East Midlands airport), Freeport East (incorporating Felixstowe and Harwich ports), Humber, Liverpool City Region, Plymouth and South Devon, Solent, Thames, and Teesside –with both Thames and Teesside operational by the end of 2021. It was recently confirmed that government will establish two Green Freeports in Scotland, with discussions ongoing to deliver on the commitment to establish at least one freeport in both Wales and Northern Ireland.

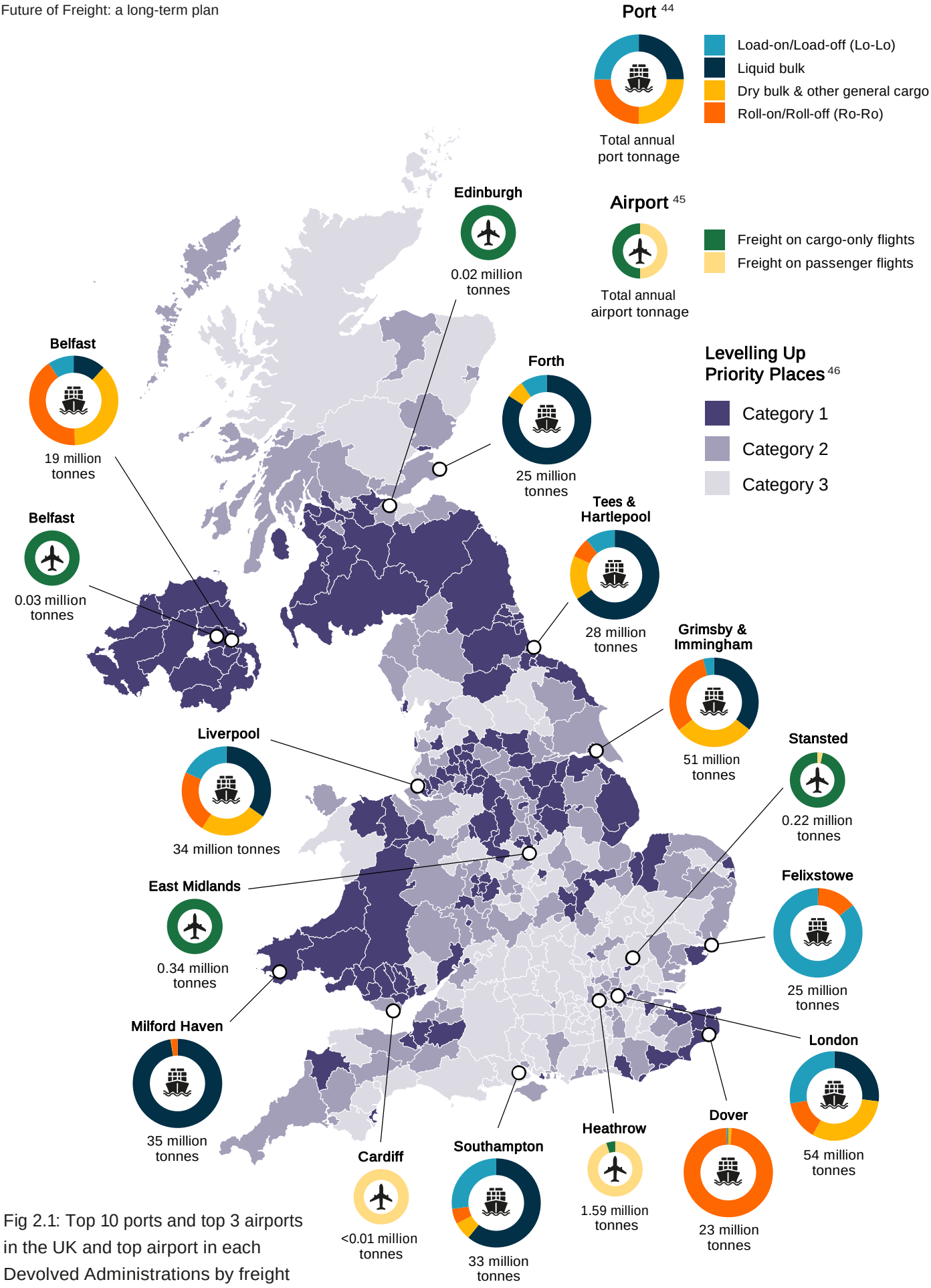


Fig 2.1: Top 10 ports and top 3 airports in the UK and top airport in each Devolved Administrations by freight tonnage (2019), alongside UK government Levelling Up Priority Areas.

2.14 Achieving the priorities identified in this plan will support key levelling up missions on “Living Standards”, “Transport Infrastructure” and “Skills”. The plan will do this by driving investment in public and private infrastructure and helping the industry to recruit and retain skilled workers across the country. It will ensure that the planning system provides appropriate support to enable logistics developers seeking to grow operations in all regions of the country to locate them where they need to be –near to the strategic road and rail network and close to an employment market.

2.15 **Strengthening the Union:** This plan reflects the devolution settlements in place across the United Kingdom. Transport policy is largely devolved and so the commitments in this plan will mostly only apply to England. Future of Freight have engaged with the Devolved Administrations throughout the development of this plan and following the publication of this plan the government will seek to collaborate with devolved Governments on its implementation.

2.16 This plan builds upon the work of Sir Peter Hendy in the *Union Connectivity Review (UCR)* (2021) and the priorities it identifies will strengthen the freight and logistics sector across the whole of the UK. The final UCR report into how transport connectivity across the UK can support economic growth and quality of life in England, Scotland, Wales, and Northern Ireland was published in November 2021[47]. The UCR recognises that the freight system across the UK is integrated and that each nation of the UK is dependent upon efficient freight operations elsewhere.

2.17 **Supply chain resilience:** Resilience within the freight and logistics system is critical. The sector underpins every supply chain into, within and out of the UK. That is why resilience is one of our objectives for the sector. External factors –COVID-19 pandemic and Brexit and, as this plan is being drafted, conflict in Ukraine, –that served to raise the status of freight have also brought increasing focus from government and business on the resilience of supply chains, and particularly of critical goods. Resilience is a theme that runs throughout the issues and priorities identified in this plan.

2.18 The resilience of the international and domestic freight and logistics sector will continue to be tested in the future. Geo-political tensions will continue to evolve. The global maritime freight system relies heavily on flows through the South China Sea, Straits of Malacca and Hormuz, and the Suez Canal. Airfreight is dependent upon overflights across multiple countries for efficient and reliable operation. Increased digitisation and data reliance mean potential for cyber threat may also rise. There have been reports of cyber-attacks across the freight network[48]. The trade landscape is shifting as the UK signs new trade agreements following Brexit and at a macro-level the trend towards trade

liberalism established since 1945 has shown some signs of stalling. Changes to the domestic and international climate will also present resilience risks to the freight network[49], with even the targeted 1.5 degrees warming, locking in hotter summers and wetter winters domestically and a higher frequency of extreme weather events that the flow of goods will need to be resilient to. Our transport network will need to be prepared to adapt to these climate changes.

2.19 In principle it is the privately owned freight and logistics sector that leads resilience efforts because it manages all freight operations and the complex web of millions of daily physical and electronic interactions. Government has a strong interest in understanding potential supply chain implications of significant disruption to the system to maintain the supply of critical goods and the overall economic wellbeing of the country and a key role in resilience of the infrastructure it invests in.

2.20 The COVID-19 pandemic saw workplace restrictions at home and abroad and changes in consumer behaviour including a dramatic increase in home delivery and a global surge in consumption of things instead of experiences. Challenges were experienced, particularly with the mixed passenger and freight business models of our roll-on-roll-off sector, a shortage of drivers for HGVs and congestion and price increases within the global deep-sea shipping market. However, the freight sector continued operations across trucks, trains, warehouses, ships and on aircraft to keep goods moving.

2.21 The COVID-19 pandemic also demonstrated targeted and proportionate intervention from government. To support the workforce and to ensure international freight flows continued to operate into and out of the country Government worked with international partners and secured exemptions for freight and logistics workers from travel restrictions.

2.22 To protect the flows of critical goods moving into and across the UK on our maritime roll-on-roll-off routes the government provided £7.7 million of financial support through a Public Service Obligation scheme to operators on some routes. This ensured that ships continued to sale with freight when a collapse in passenger revenue meant some sailings were no-longer economic[50]. The UK government implemented 33 measures to address a shortage of HGV drivers impacting upon the distribution of goods across the UK. These focussed on increasing efficiency in existing supply chains, providing support and training for new HGV drivers, expanding HGV driver testing capacity and improving licencing processes, attracting drivers back to the sector and improving conditions, ensuring the stability of the fuel supply chain and economic measures to support the haulage industry[51].

2.23 The rail freight industry played a vital role throughout the pandemic, ensuring that food and critical supplies, such as Personal Protective Equipment (PPE), got to where they needed to go. The Government recognises how integral rail freight is to the prosperity of the UK and resilience of our supply chains, which became even more apparent during the pandemic. In particular, the way in which mode diversification across all modes supports resilience. To support the egress of containers from the Port of Felixstowe, Network Rail has identified capacity to increase the number of train paths available from 37 paths a day to 40 each way (of which one path is already operational), which will deliver a significant boost to capacity. To further increase capacity for rail freight in 2021, it has also created new paths for rail freight services from Liverpool and Immingham Ports, and a new service from Doncaster to Mossend. In response to a surge in container volumes and to mitigate the shortage of HGV drivers, the Network Rail Southampton Freight Train Lengthening scheme has enabled trains of up to 775 metres, or 14 extra containers per train, out of the Port of Southampton.

2.24 The private freight and logistics sector also responded strongly to the COVID-19 pandemic to deliver a resilient sector. Strategic adaptation and innovative operating models ensured that maritime and aviation freight kept operating throughout, ensuring the delivery of vital supplies including PPE and vaccines.

Case study – air freight adaptation for resilience during the COVID-19 pandemic

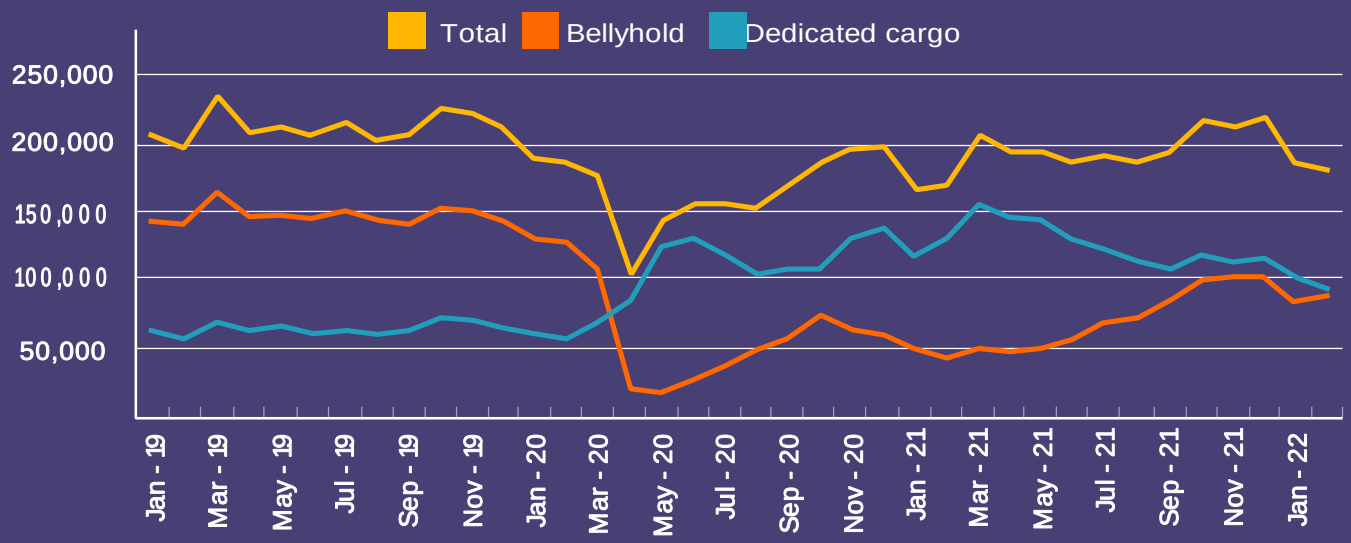
The onset of the pandemic and global drops in international passenger air travel presented huge challenges to the aviation industry. Alongside this there was surging demand for the express transport of medical supplies including medicines, PPE and ventilators. With many passenger planes grounded the air freight industry saw an opportunity to innovatively meet this demand and make up for shortfall in passenger revenues. The aviation freight industry converted passenger aircraft to carry medical supplies through the spring of 2020 successfully boosting capacity to get vital supplies across the world.

As the pandemic went on, the air freight sector built on this strong record. To maintain flows of high value and time critical airfreight, a shift took place from bellyhold freight to dedicated air freighters.

The share of bellyhold freight dropped from 70% in 2019 to only 38% in 2020 and the use of air freighters meant major cargo hubs at East Midlands and Stansted airports saw strong growth. So, while passenger volumes dropped by 75% during 2020 air cargo saw only a 21% reduction.

This sector led resilience adaptation is an excellent example of the strengths of the freight and logistics sector at large.

Impact on air freight tonnage over the past 3 years



2.25 The sector is also building resilience through expansion of freight services. Owners are developing plans for significant investment at major container ports of Liverpool, Bristol, and Felixstowe. New DFDS services are operating from Sheerness and Irish Ferries is joining operations at Dover.

2.26 This plan does not address operational response and neither does it seek to specifically address the scenarios summarised. Rather its contribution is that the initiatives set out are important components of building resilience. A resilient sector needs enough people with the right skills to be responsive and agile to disruptions. Resilience will entail managing long-term change, such as the transition to zero-carbon as efficiently as possible. A resilient sector will need to build and optimise infrastructure –public and private –, supporting its adaptation to climate change, and to have access to the best data and technology.

2.27 **Increasing our global impact:** The priorities identified with industry in this plan are primarily domestic focused, but because of the importance of international supply chains to our prosperity the UK government has a strong interest in securing the long-term success of the international freight and logistics sector. The government is very active in this area and will continue to be so, supporting the development and enforcement of international rules and regulations that make the global freight network viable. Work is undertaken bilaterally and multilaterally through international institutions that collectively regulate trade, security, the environment and international aviation and shipping.

2.28 Pre-disruption caused by the COVID-19 pandemic, the UK had the third largest aviation network in the world and a significant aerospace industry. Our permanent representation at the UN's International Civil Aviation Organisation (ICAO) takes a leading role driving forward global regulation of aviation including the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to reduce emission to 50% of 2005 levels by 2050. Bilaterally, the UK negotiates Air Services Agreements (ASA) with nations across the world. ASAs set the parameters for flights between the signatories and UK agreements support our large network of long-haul air freight routes.

2.29 The UK is host to the International Maritime Organisation (IMO), the only UN agency based in the UK, and focused on enhancing maritime safety and protecting the maritime environment. In IMO, the UK is a leader in the field of international maritime environmental diplomacy, securing agreement to the target of a 50% greenhouse gas (GHG) emission reduction from the sector by 2050. To support seafarers government works proactively within the International Labour Organisation (ILO) to drive up minimum standards and through both IMO and ILO it took a leading role to address the repatriation of seafarers stuck onboard vessels.

2.30 The UK hosted COP26 in 2021, securing 22 signatories to the Clydebank Declaration to support the establishment of green shipping corridors –zero carbon maritime routes –between two or more ports. Throughout the COVID-19 pandemic Government worked bilaterally with near neighbours and with the EU to deliver exemptions for freight workers from travel restrictions to ensure the continued flow of goods into and out of the UK.

Themes

2.31 This plan sets out specific actions identified in collaboration with the freight and logistics sector that will support our joint objectives for the sector. In addition, there are two themes which run through the plan: **Raising the status of freight** and **a multi-modal approach to the sector**.

2.32 **Raising the status of freight:** In 2019 the National Infrastructure Commission (NIC) published *Sustainable delivery: the challenge for freight*[52]. The report made a number of recommendations to government including on: the decarbonisation of road and rail freight; addressing congestion through proper recognition of freight and its needs within the planning system; and developing common data standards for application at the national and local levels. Government has responded to this report[53]. The report also set out that sustained success for freight and logistics required government and the industry to raise its status within the public and private sectors and with the public.

2.33 The success of this plan and the sector is dependent upon the value of freight and logistics being recognised by all parties.

2.34 The COVID-19 pandemic, and the UK's exit from the European Union have raised awareness of the role that freight and logistics plays. The rippling impacts in the freight system have been felt across society, and whilst this is not welcome, it has served to focus minds on the importance of freight and logistics across government and industry. The value placed on the sector by the public is trending upwards, with 68% of respondents to an industry survey agreeing that those who work in the sector deserve more appreciation than they get[54].

2.35 This plan is an output of the raised status of freight. It is the first time that government has sought to develop, in collaboration with industry, a long-term and cross-modal plan for the sector. Its development has also driven the establishment of structures and fora critical for maintaining a long-term focus on freight. The **Freight Council** was established in 2021 as a cross-modal industry and government forum to drive the development of this plan[55]. Chaired by a Department for Transport Minister (DfT) it brings together senior leaders from the freight and logistics trade associations and government departments across Whitehall. The Council has a significant role in managing the delivery of this plan. To support this process **a strong independent co-chair will be appointed to advocate for the sector and to drive its programme of work**.

2.36 DfT has established a cross-cutting directorate responsible for logistics and borders which will complement the creation of supply chain focused workstreams across government including in Cabinet Office, the Department for International Trade (DIT) and Department of Environment, Food and Rural Affairs.

2.37 **Multi-modal approach:** The NIC report also made clear freight and logistics required a multi-modal systems approach. Development of this plan has been undertaken through engagement with all modes of the freight and logistics sector. Each priority identified in this plan is multi-modal.

Approach and process

2.38 This plan recognises that there is much more activity taking place across the public and private realms than is possible to describe in detail in this plan. At **Annex A** we seek to capture some of this important work alongside a high-level assessment of which of our objectives this work supports.

2.39 The plan also builds on the expert advice of the National Infrastructure Commission's *Better Delivery: The Challenge for Freight report* (2019). This plan seeks to further the progress made in relation to this NIC report as summarised in the Government's response to the NIC in August 2021.

2.40 This plan represents the shared commitment of the government and the freight and logistics sector to work to achieve a sector that is **cost efficient, reliable, resilient, environmentally sustainable and valued by society**. The approach has been collaborative between government and the sector, its customers and support services. Identifying challenges and opportunities, and then, agreeing and prioritising clear actions to address them.

2.41 This has been achieved through internal and cross-Whitehall policy baselining and discussion and agreement at five meetings of the Freight Council chaired by the cross-cutting Minister in the Department for Transport and attended by senior representatives from the freight transport trade associations and other departments from across Whitehall. Further engagement took place through four workshops and five roundtables attended by more than 300 stakeholders from the public and private sector. Each workshop focused on one of the Department for Transport's strategic priorities – improve transport for the user, grow and level-up the economy, increase our global impact and reduce environmental impacts. The roundtables followed on from the workshops and focused on developing actions to support the priorities identified. More detail on our engagement approach is detailed in chapter 8.

2.42 Five priority areas emerging from this engagement have been further developed by the Department for Transport and with the Freight Council. The following chapters set out each of these priorities and the agreed actions.

Future of Freight plan priorities:

1 National Freight Network

2 Enabling the transition to Net Zero

3 Planning

4 People and skills

5 Data and technology

3

Priority 1 – National Freight Network

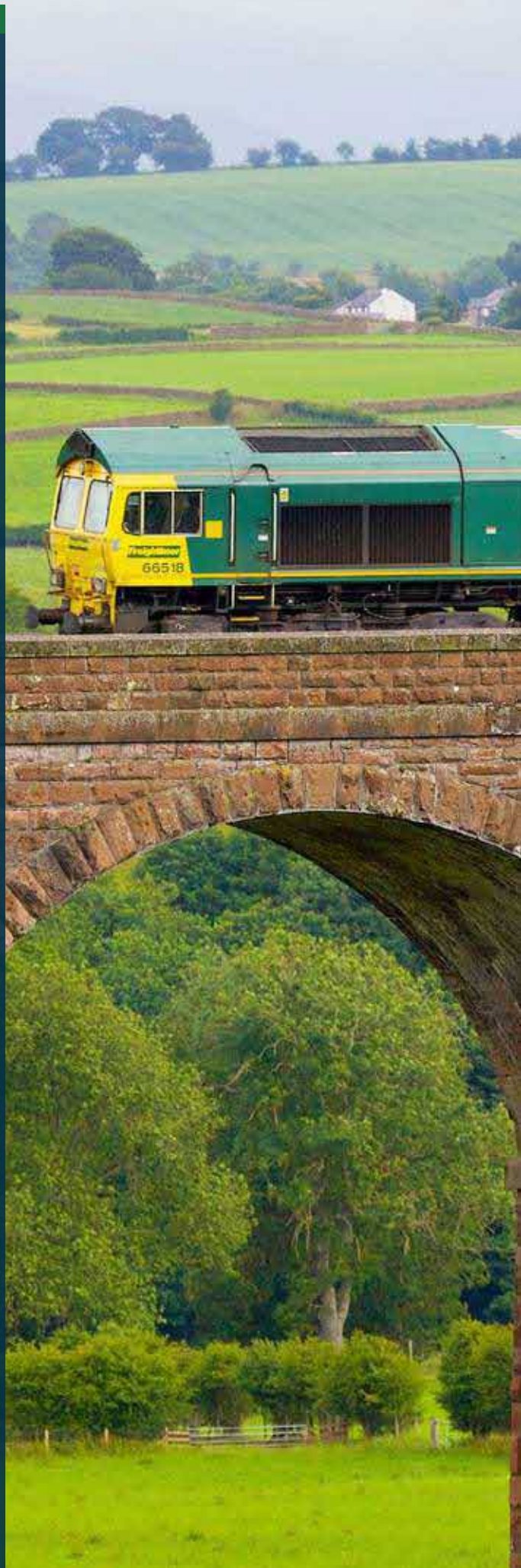
Government and industry will collaborate to:

- Identify a National Freight Network
- Undertake valuation of Freight studies
- Improve visibility of Freight in Infrastructure Planning
- Support Modal Shift

The challenge ahead

The challenge:

Lack of visibility and understanding of the freight network as a cross-modal system by the sector, government and freight end-users limits joined-up decision-making by both the public and private sectors .



3.1 The UK has a rich history of leading the world in the rollout of high-quality freight transport infrastructure, from canals to railways to roads to aviation. Today our freight network is geographically diverse and supports comprehensive freight transport across all four corners of the country. Vital to a cost-effective, resilient, reliable, environmentally sustainable and valued by society freight sector is high-quality infrastructure across the UK, that is both optimised for the needs of the sector and optimally utilised by the sector.

3.2 The freight network is highly complex and understanding it at a cross-modal systems level is difficult. Given this difficulty the majority of investment in freight infrastructure to date has been focused modally. However, freight operations are highly integrated and inefficiencies on one mode or part of

the network can show up in disruption at other parts of the network. An example being the recent increase in container volumes through UK ports, which was exacerbated by and highlighted the issues of lack of hauliers and inland storage. This shows the limitations of a modal approach to infrastructure investment as inefficiencies require collaboration and a system-level view to address. Similarly, a modal approach to investment and prioritisation of freight has at times led to freight being transported in less environmentally sustainable ways due to cost, speed and reliability considerations. The lack of awareness of the value of end-to-end freight journeys has also made it harder for vital warehousing and distribution centres and rail freight interchanges to get through local planning systems.

3.3 Addressing such inefficiencies requires visibility of the whole of the UK's freight network. Across government and the sector this visibility is not consolidated in one place and so understanding of the components of the system and how they integrate with each other to form a core freight network is complex. Until recently it would have been impossible to conceive of comprehending the whole freight system. However, the rapid proliferation of technology and data, alongside huge expansions in analytical capability in the sector and government, present an opportunity for the first time to try and develop a system-level view of the freight network.

3.4 It is important that government and industry grasp this opportunity to optimise infrastructure for freight for three reasons:

- **To target policy, investment and planning decisions strategically to maximise efficiency;**
- **To enable the best freight infrastructure decisions for the UK economy, at local, regional and national level; and**
- **To make operational decisions that maximally utilise all existing infrastructure .**

3.5 Investment decisions for infrastructure projects are made on a modal basis and the needs of end-to-end supply chains are not at the forefront of those decisions. The lack of a clear understanding of the modes as an integrated system with a core strategic network, means that investment decisions may not be correctly prioritised. The lack of a systemic cross-modal view of the network means that limitations and bottlenecks are not properly understood for their impact on the whole system and are therefore not adequately addressed. The lack of understanding of the whole network also makes it harder to understand the value of freight to the economy and the value of specific interventions, thus making it harder to understand which infrastructure projects to prioritise. Finally, the lack of a cross-modal view limits the ability for the system to offset disruption from planned works on one mode through extra capacity in a parallel mode.

Strategic goal:

A system-level approach to the freight network means that end-to-end freight journeys are more efficient and reliable . Better understanding of freight as a system ensures the needs of freight are appropriately considered as part of decision-making processes, and facilitates a better utilisation of existing infrastructure, including through modal shift .

3.6 The lack of a clear system-level cross-modal view of the freight network reduces visibility and awareness for freight operators and buyers of the full range of modal choices. This information shortage means that the full range of infrastructure is not being optimally utilised as users aren't aware of alternative options. This lack of a system level view also makes it difficult for operators to make optimal capacity decisions at the cross-modal system level and across passenger and freight needs. For example, it is currently hard for Network Rail and National Highways to collaboratively spot opportunities where there are 'corridors' where roads are congested due to limited capacity and where there are equivalent rail routes with underutilised capacity that could be used to ease this congestion. On an often constrained network, it is becoming increasingly important to look towards maximising the best use of existing capacity and ensure we capitalise on efficient network planning to optimise network performance and facilitate growth.

Where we're going

3.7 Delivering this requires expanding visibility of freight infrastructure. Creating an understanding of the UK's freight network that is cross-modally integrated, clear and responsive to changing circumstances. Unlocking this increased visibility will be transformative to the UK freight sector, allowing better decisions around infrastructure investment, and better Day-to-day operational decisions to make the most of existing infrastructure.

3.8 Better UK infrastructure to support freight requires better consideration of freight and its supporting facilities being made at the outset of infrastructure programmes, including warehousing location, welfare, border controls and energy requirements. Ensuring that investment is made in high-quality infrastructure that benefits the whole freight system. This will require greater recognition of the importance of the freight network within public infrastructure policy and investment decisions based upon a wider awareness of freight as an integrated, multi-modal end-to-end network that is a vital component of our supply chains.

These public investment decisions will need to be aligned with and geared towards maximum synergy with private sector investment decisions in vital freight infrastructure such as ports, airports, rail terminals, warehousing and more. This will need to be aligned with the transition to net zero which will require large scale investment and coordination from the public and private sector to deliver vital future energy infrastructure across the UK freight network. Pivotal to delivering all of this will be achieving a stronger cross-modal understanding of the freight network and it's infrastructure, making sure that private and public investment is coordinated across the network to deliver maximum benefits across all modes.

3.9 This vision will also require removing barriers to freight buyers and operators visibility of alternative modes and capacity across the network to support more efficient use of existing infrastructure. This will include delivering stronger knowledge and expertise within freight user and intermediary community on how to access different modal options. This will need to be complemented by efforts to unlock further capacity across the network, in particular efforts to deliver greater rail freight capacity.

3.10 Achieving this vision will unlock huge benefits to the freight sector and broader economy. The UK will see continuous improvement of the **economic efficiency** and **reliability** of end-to-end freight journeys with **greater resilience** built into the system. Buyers and operators of freight transport will have a high awareness and easy access to the range of modal choices for freight and the capacity that exists across the system. Consequently, opportunities for modal shift, where appropriate, to support objectives on congestion, built and natural environment, and decarbonisation will be maximised.

Strong foundations

The UK's current freight network

3.11 The UK's current freight network has evolved over centuries, reflecting the changing nature of trade into, out of and across the country. The modern system began to take shape with the Industrial Revolution and its requirement for mass transport of raw materials and finished product. This drove the development of the canal and subsequently railway networks and finally, alongside demand from the private motorist, our modern motorway network. Important before industrialisation and central after it, Ports across the country have risen and fallen reflecting the evolution of our international trading relationships. In recent decades, airports have become vital to the transport of high value international goods and unlocking express services into and out of

the country. Finally, our network of warehouses has evolved from places focused on storage and inventory to vital hubs supporting efficient aggregation, disaggregation, and distribution of goods.

Open to the world: martime, aviation and international rail freight

3.12 As highlighted in Chapter 1. Freight and Logistics, the UK benefits from a varied and comprehensive network of ports, airports and international rail links to international supply chains facilitated by significant government activity in multilateral institutions and bilateral relationships.

3.13 These have evolved through years of public and private investments in improving infrastructure that keeps the UK open to the world. Today, as the UK's freight links to international supply chains are almost entirely privately owned or operated, the majority of investment in this infrastructure is privately led.

3.14 The UK's ports and airports are majority privately owned and all are privately operated. New ports or developments at existing ports are mostly privately funded by the owner or operator and are undertaken in response to market demand, maintenance needs, or opportunities for more efficient technology. In the last decade, private investment has built an entire new container port at London Gateway with total investment in excess of £1.8 billion[56], and a new highly automated container terminal –Liverpool 2 –at the Port of Liverpool at a cost of £400 million[57]. Government investment at ports is not typical, although to help the sector prepare for new customs arrangements following Brexit the government developed the Port Infrastructure Fund to help ports build the physical infrastructure required[58]. Similarly, infrastructure and fleet upgrades for air freight are funded predominantly by the private sector. This is supplemented with public funding for connectivity upgrades to improve rail and road access to ports and airports[59].

3.15 As previously summarised, these international gateways are connected to a similarly comprehensive domestic network of roads, rail, inland waterways, domestic aviation and shipping and other innovative modes. Investment in this domestic network of infrastructure comes through a complex mix of public and private investment. As seen above, maritime and aviation investments are almost entirely private, as are investments in warehousing. It is estimated that the warehousing sector invested in 40 million sq. ft. of new warehousing and distribution space due for completion in 2021 compared to 20 million sq. ft. completed in the previous year.

Connecting with the domestic network: road haulage, rail freight and domestic shipping

3.16 As previously summarised, these international gateways are connected to a similarly comprehensive domestic network of roads, rail, inland waterways, domestic aviation, shipping and other innovative modes. Investment in this domestic network of infrastructure comes through a complex mix of public and private investment. As seen above, maritime and aviation investments are almost entirely private, as are investments in warehousing. It is estimated that the warehousing sector invested in 40 million sq. ft. of new warehousing and distribution space due for completion in 2021 compared to 20 million sq. ft. completed in the previous year[60].

3.17 For road and rail investment tends to be private where it is focused on fleets, rolling stock interchanges and terminals, and public, where it is related to the road and rail networks. The road freight sector invests privately in its fleet, registering 54,000 new heavy goods vehicles in 2019, with gas and battery electric vehicles making up 0.2% of total registered HGVs with expectations that these and other low-emission and zero-emission vehicle registrations will increase over the coming years[61]. However, investments in the road and rail network that both modes rely on are predominantly public.

3.18 The Road Investment Strategy (RIS) provides 5-year funding settlements for the maintenance, renewal and enhancement of England's strategic road network by National Highways. Between 2015–2020 RIS1 invested £17.6 billion in England's strategic roads[62], and between 2020–2025 RIS2 will provide further funding of £24bn[63]. RIS3 will run from April 2025 and is in the early stages of development. Local roads are managed, maintained and enhanced by local highway authorities and combined authorities, Local roads are funded through a combination of locally generated taxes and rates, and through grant allocations to local highway authorities for specific enhancements and interventions. These investments and broader policy around planning (spatial and transport), design and kerbside management at the local level have significant impact on urban logistics flows and determine the efficiency of 'last mile' journeys.

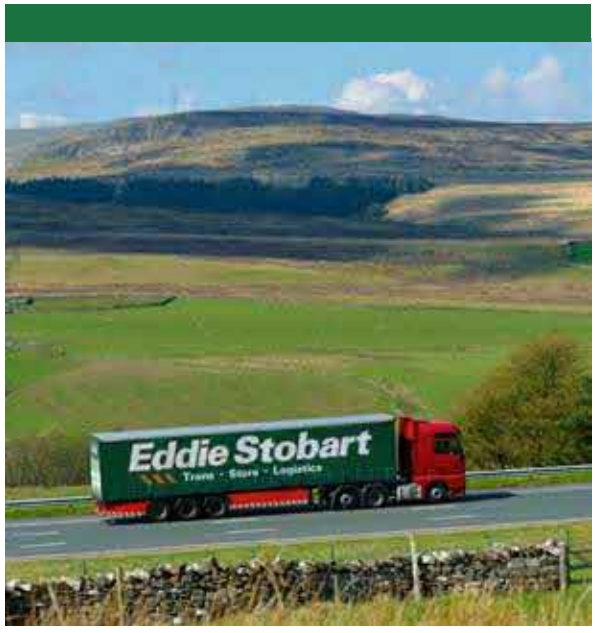
3.19 For rail, the Periodic Review process sets a five-year settlement that determines the level of funding the infrastructure owner (Network Rail/Great British Railways) receives for its operations, maintenance and renewals activities. Of fundamental importance to the rail freight industry, the Periodic Review process also sets a framework for how much freight customers will be charged to access the rail network. The settlement for operations, maintenance and renewals in Control Period 6 (2019–2024) was over £35bn[64]. Separately, the government will invest around £9bn in enhancements on the network for

both passengers and freight over the course of Control Period 6. Between 2014–2019 (Control Period 5), the government invested over £235m in rail freight enhancements to improve the capacity and capability of the network for freight users, with a further £40m from 2019 onwards[65]. For Control Period 6 enhancements were funded through the separate but parallel Rail Network Enhancements Pipeline (RNEP) process. Most recent examples of RNEP freight enhancements completed are Port of Liverpool –West Coast Mainline track doubling improvements[66] and upgrades to enable full length 775m intermodal container freight trains to and from the Port of Southampton[67]. The next Periodic Review is in 2023 and will cover the next five years from April 2024, known as Control Period 7.

Thinking cross-modally

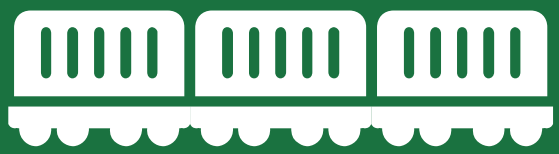
3.20 Overall, the UK has a highly comprehensive and complex freight network, with many goods passing through multiple modes on their end-to-end journey, and each mode playing vital and specialist roles. Given the structures of the industry and government, the majority of investment in freight infrastructure to date has been focused on modal improvements, with significant amounts invested in making each mode operate as effectively as possible. However, in operation as seen above, the freight system is highly integrated and, as explained in *the challenge ahead,* inefficiencies and bottlenecks can ripple across the network with bad outcomes appearing far away from causation where there aren't adequate levers or incentive structures to address these problems. As such, infrastructure investment and decision making must account not only for individual modes but also for intermodal links and cross-modal dependencies. Ensuring an efficient, resilient, reliable and environmentally sustainable freight sector will require government and industry taking a collaborative and cross-modal approach to investment to address inefficiencies.

3.21 In the UK the area where this cross-modal approach has been most visible has been in work to facilitate modal shift through investment in rail freight interchanges. Strategic rail freight interchanges have been built across the country[68], an example being investment at Daventry International Rail Freight Terminal (DIRFT) in the "Golden Triangle". DIRFT is a key rail-road intermodal freight terminal with rail connections to

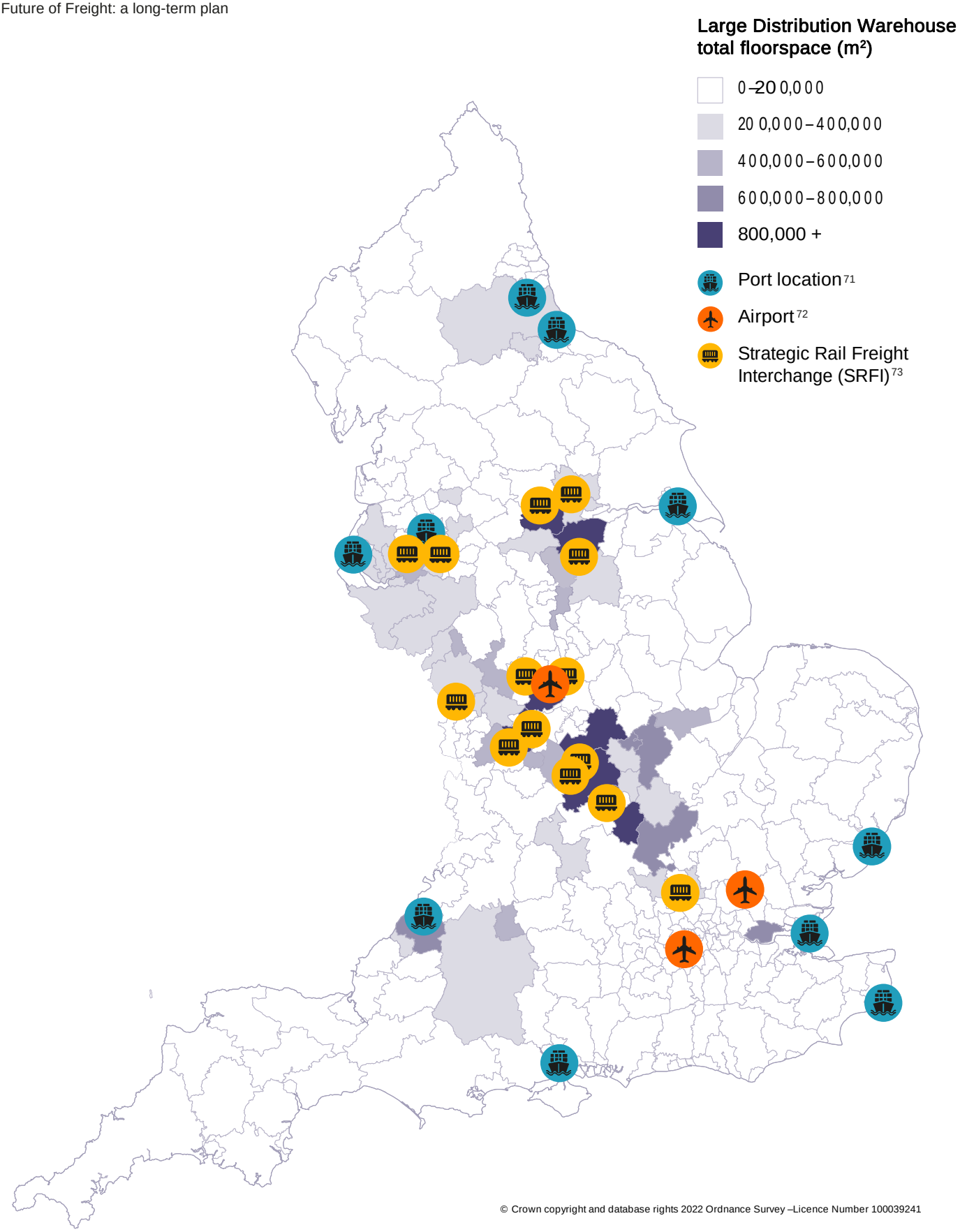


the West Coast Mainline and onwards to the channel tunnel and deep seaports, facilitating the flow of goods into the country through the interchange and onto the M1, M6, A14 and A5, allowing the import/export and transport of goods in a strategic multi-modal and low carbon fashion[69]. Interchanges such as these not only meet the needs of the freight sector but also support wider government objectives around decarbonisation and congestion. All helping to deliver a more efficient, resilient, and environmentally sustainable freight sector. The Planning Act 2008 includes strategic rail freight interchanges within the scope of Nationally Significant Infrastructure Projects (NSIP) enabling schemes meeting the threshold to be considered directly by the Planning Inspectorate, rather than by local planning authorities, further supporting the development of these vital interchanges[70].

3.22 Building on the success of investment in strategic rail freight interchanges will require long-term strategic action from government and industry, focused on similar opportunities to bolster the operation of the freight network as a whole through improvements to infrastructure with multi-modal impacts. This will require a clear understanding of the National Freight Network at a system level, understanding how the modes interact and link together to form an end-to-end freight system.



Between 2014–2019 (CP5), the government invested over £235m in rail freight enhancements



Top 10 port locations and top 3 airports in England by tonnage and Strategic Rail Freight Interchanges, alongside total Large Distribution Warehouse floorspace[74] by local authority
(note, port location may represent multiple ports within the same river estuary)

3.23 Government and industry are working hard to deliver this system level view and are building on strong foundations. There is a strong sense of the key modal and intermodal 'nodes' in the freight network, as seen in figure 3.1. This shows the complex multimodal picture, picking out the key freight 'nodes' in England. The map shows the major ports and airports where goods enter and exit the UK, alongside the locations of the strategic rail freight interchanges and the local authorities with major concentrations of warehousing and distribution centre floorspaces. As such a cross-modal picture is built up of the stopping points of goods across England, first entering our ports, then on to interchanges and warehouses, before finally heading to end businesses and consumers.

3.24 These nodes are linked by a high-quality road, rail, inland waterway, coastal shipping and regional air connectivity network, joining up these key points and connecting the smallest of towns and villages to international supply chains and major hubs. This predominantly utilises the strategic and major roads network[75] and major rail freight corridors[76], however towards the 'last mile' it utilises the full local extent of the UK's road network, and specific local rail links.

3.25 In recent years, there has also been attempts to understand further the major corridors and flows of freight across the UK. Government and industry have worked hard over recent years to build a stronger picture of the geography of the UK's national Freight Network. In particular, the Network Rail and National Highways collaboration on the *Solent to the Midlands Multimodal Freight Strategy*[77] has shown the benefits of taking a multimodal approach to understanding strategic freight corridors, and has enhanced government understanding of the growing importance of this key two-way route for freight. Similarly, the *Port Connectivity Studies* (2018)[78], undertaken by the Department for Transport, have developed government understanding of freight flows by rail and road to and from the UK's ports. These studies have served to highlight key areas of improvement for connectivity between modes in the national freight network, highlighting the need for greater cross-modal working in government and supporting the case for a full consideration of freight in transport decision making.

Case study – Solent to the Midlands Multimodal Freight Strategy

In June 2021 Network Rail (NR) and National Highways (NH) released the first phase of the Solent to the Midlands Multimodal Freight Strategy. The strategy represents a landmark step forward in collaboration between the organisations on strategic multimodal planning and a blueprint for government on how to consider key freight corridors from a cross-modal perspective.

The Solent to Midlands corridor was chosen as it represents one of the UK's most important freight corridors, connecting the global freight and logistics hubs of the Solent ports, particularly Southampton, with the 'golden triangle' of freight distribution in the midlands. The A34 linking the two is closely mirrored by equivalent rail routes and so these parallel routes are an ideal candidate for cross-modal analysis.

The strategy demonstrates how both networks could be used more efficiently, in terms of their overall capacity and their carbon footprint, outlining opportunities for new and enhanced freight markets and recommending NH and NR: commit to continued joint working, remove barrier to rail freight growth, unlock new markets for transporting commodities by rail, and drive froward decarbonisation. The study has begun to use data in innovative ways to identify freight flows with a potential to be switched to rail. Altogether, the strategy and continued joint working will support the two organisations to free up road capacity through more efficient utilisation of the rail freight network.

NR and NH are now committed to building on the strategy for this corridor and exploring similar opportunities for joint working.

3.26 These programmes of work, alongside broader analysis, modelling and mapping undertaken in recent years, means that government now has significant, but not sufficient, understanding of the key freight flows across the UK. In order to properly support the freight network, government will need to expand its understanding into a comprehensive view of the most critical and strategic freight flows across the UK. To inform this work to map out a National Freight Network (NFN), government and industry will need to use all available data on the volume, value and criticality of freight flows, balancing these to come to an agreed understanding of the most strategically important journeys, nodes and infrastructure.

What next?

3.27 Delivering our vision and addressing the challenge ahead will require building on the UKs strong existing infrastructure, as summarised above, and consolidating these advantages. This will require building on government and industry's work to date to understand and map freight flows, value and criticality and an initial view of the key routes of significance to the freight network. This will be vital to allowing industry and government to better understand freight infrastructure needs and to supporting industry to maximise opportunities for modal shift. This work to improve understanding at the system level will also be vital to inform decision making around decarbonisation, future energy sources and modal shift. In the interim, the committed projects outlined in the annex A will go some way in easing congestion and improving freight flows.

Key activities for achieving a strong Future of Freight

3.28 **Identifying a National Freight Network:** Working together the Freight Council and the government will develop a fuller understanding of the domestic freight network across road, rail, maritime, aviation, inland waterway and warehouse infrastructure. This will be a complex process starting with developing a stronger data and strategic picture of the network before exploring how this could be consolidated into a NFN.

- **Understanding the network:** Government will work across the public sector and with industry to use all available data and explore new opportunities to understand the volume, value and criticality of freight flows into, across and out of the UK to define the geographical spread and physical infrastructure of the NFN and to understand the implications of bottlenecks and vulnerabilities. As part of this, government will seek to improve the coordination of data cross-modally. We will also work to consider the need and the feasibility of strengthening our analytical capability on freight analysis, modelling, forecasts and logistic

operations across the NFN. This could potentially include data collections, new tool developments and methodology explorations. Improving our evidence base will enable us to enhance our collaboration with industry, improving freight's contribution to the wider economy and delivering better outcomes against key work areas such as resilience and mode shift.

- Guided by the appraisal framework in the Green Book and Transport Analysis Guidance (TAG), government will consider undertaking a study to understand the valuation of freight and freight transports to inform the NFN's use cases. Government is already undertaking a Road Freight Value of Time study to update the HGV's representation in modelling and appraisal process for road infrastructure investments. This work to establish an understanding of the NFN, will be underpinned by a supportive Industry, led by the Freight council, proactively delivering opportunities to share data with government.

- **Using the Network:** The NFN will focus on supporting end to end supply chains and take a corridor-based approach seeking to create a strategic overview of the priority corridors and infrastructure within them. Government and industry will consider how this can be used to better coordinate strategic alignment between modes in each corridor. Government will work to use the NFN to inform and support key activities such as net zero, including the delivery of zero-carbon energy infrastructure (see chapter 4), and Planning (see chapter 5). Development and implementation of the NFN will be aligned with any UK strategic transport network work arising following the Government's response to the Union Connectivity Review. Government will work to include analysis underpinning the NFN in its infrastructure investment decisions. It should be noted that all investment decisions will need to be guided by affordability and value for money considerations within existing investment programmes and decision-making processes.

How might the NFN be used:

The NFN could be used to identify the key freight corridors across the country, including the density of freight flows and value and criticality of goods to the UK economy and society along these corridors . This would allow HMG and Industry to prioritise strategically important corridors, e .g . those with particular economic, levelling up or decarbonisation benefits

This is particularly pertinent for rail, given the current constrained fiscal environment for enhancements, and the significant demands on available RNEP funding.

3.29 **Visibility of freight in infrastructure planning:** Government will continue to provide long-term, secure funding through the RIS and CP process for roads and railways. Through the Freight Council the government and industry will work together to support awareness of and engagement with the RIS and CP processes so that the freight and logistics sector is better able to engage with those processes. In particular:

- Government will work with the Freight council to ensure engagement with upcoming consultations on RIS3.
- Government will also work to encourage collaboration between infrastructure organisations, as demonstrated by the Solent-Midlands joint Network Rail and National Highway strategy.
- Government will work with our ports to ensure that regulatory frameworks continue to support high levels of private sector investment in port infrastructure. Government will also work with our ports to ensure port connectivity needs are adequately represented in road and rail infrastructure decisions.
- As above, Government will work with industry to actively seek ways of improving the methodologies of valuing freight transports, used in infrastructure investment decision-making processes, under the Green Book and transport analysis guidance (TAG).

3.30 **UK Infrastructure Bank:** Government has recently established the National Infrastructure Bank, providing £22bn of infrastructure finance to tackle climate change and support regional and local economic growth across the United Kingdom. Government will work with the Freight Council to raise awareness of the bank, and ensure the broader freight sector is taking opportunities for infrastructure financing through this route.

3.31 **Resilience of infrastructure:** In consultation with industry, the government will undertake a review of the pros and cons of introducing a reporting requirement on resilience and risk management across the sector. Government and industry must also bolster climate adaptation. This will involve modelling the vulnerabilities of the freight system from climate change and developing adaptation plans to ensure it can withstand a changing climate, both in the UK and globally.

3.32 **Supporting modal shift:** Government will work with industry to continue efforts to encourage a greater utilisation of freight across all modes, including:

- *Modal shift to rail freight: Gov*ernment remains fully committed to unlocking the economic and environmental

benefits rail freight can deliver, including supporting decarbonisation and reducing congestion on Britain's roads. Government continues to invest to support rail freight growth, and will set out our priorities in the forthcoming publication of the Rail Network Enhancements Pipeline. As part of rail reform, the railway will have a long-term strategy which will set out, for the first time, key strategic priorities for the whole rail network for the next 30 years. *The Williams-Shapps Plan for rail* (2019), including commitments to a rail freight growth target made in it and in the Transport Decarbonisation Plan, will further strengthen the place of rail freight on the national network, create new opportunities for growth and investment, and maximising its environmental benefits. The Government fully supports the continued growth and success of international rail freight services, where it has the potential to accommodate an even great shift of freight from road to rail and boost resilience. The Government will continue to work closely with the sector to facilitate the launch of new routes, build on our close collaboration, including developing a bespoke inland customs clearance model for rail freight terminals.

- *Mode Shift Revenue Support and Waterborne Freight Grant:* The government commits to ongoing funding of the successful Mode Shift

The Williams-Shapps Plan for rail (2019) and the opportunities for rail Freight

The Government is committed to supporting rail freight to enable it to thrive and grow recognising the role the sector will play in achieving net zero targets and the government's ambitious economic and Environmental agenda .

The WSPR rightly gave a high priority to the economic and environmental benefits of rail freight, putting rail freight at the centre of its reforms with ambitious plans to grow rail freight and ensure key protections for rail freight are prioritised . The WSPR has created exciting opportunities for the rail freight sector including:

- A **Strategic Freight Unit** within Great British Railways dedicated to improving performance and efficiency across the network for rail freight customers.
- A **duty on Great British Railways to promote rail freight** to help drive rail freight growth, recognising the sector's vast economic and environmental benefits.
- The introduction of a **rail freight growth target** which we will be consulting on shortly.

Revenue Support and Waterborne Freight Grant schemes for a further three years with the total grant available for the MSRS maintained at £20m per year. The current scheme removes on average 900,000 diesel HGV journeys off the road and 58,000 tonnes of CO2 emissions each year and supports modal shift rail, inland waterways and coastal & short sea shipping[79].

- *Innovative modes:* Working with industry to explore the opportunities for and barriers to utilisation of new innovative freight modes, such as e-cargo bikes, freight on light rail, and high-speed rail freight into cities.
- *Publicity and communications on cross-modal freight:* Government will work with industry to raise the profile of less utilised freight modes, their benefits (including reliability, carbon emission reduction and congestion reductions) and create greater visibility of capacity across the freight network. This work will aim to build on existing portals and services. Through the Freight Council we will review access to freight advisory services for users of freight and promote and, where a need is identified, improve these services.
- *Using enhanced understanding of cross-modal freight to explore opportunities for immediate capacity uplifts:* Exploration of options to create more capacity on network, such as new paths for rail freight, longer trains, evening and weekend paths, utilisation of Inland waterway, smart kerb management and flightpath to future.

Building on the National Infrastructure Commission (NIC):

This renewed cross-modal approach including a mapping of key freight corridors as part of the National Freight network, directly expands on the NIC's advice, recommendations and the government's response . The cross-modal analysis and modal shift opportunities encapsulated above will support further work on the NIC's recommendations in relation to decarbonising freight, new and better data and a new status for freight . (see Annex B for further details)

The current scheme removes on average

over

900,000

diesel HGV journeys

off the road and

58,000

tonnes of CO2

emissions each year

Achieving our Future of Freight vision

The above key activities will deliver a sector that is:

Reliable	The National Freight Network and increased modal shift will support efforts to reduce congestion across the network, delivering more predictable freight journey times.
Resilient	The NFN, modal shift and better prioritisation of the freight network, will diversify freight journeys, providing better adaptability and resilience to disruption across the freight network.
Environmentally sustainable	Supporting modal shift will contribute to achieving emissions targets. The NFN will support targeted roll-out of future energy infrastructure. The NFN will also support more strategic locating of freight and logistics land closer to strategic transport links reducing noise and air pollution impacts.
Valued by society	The NFN will ensure greater understanding of the network across the public and private sector, boosting freight's profile. This alongside support for modal shift will reduce the negative externalities of freight and therefore improve it's reputation with the public.

We will succeed when:

We will know we are making progress against this priority when:

- Government and industry have expanded our data and evidence picture of the domestic freight network. We have identified what a NFN would entail, with a decision on continuing development of the NFN reached by the end of 2022. Underpinning evidence continues to be iterated yearly with further data contributing to understanding of key freight corridors and nodes.
- Industry awareness of availability and access to cross-modal freight solutions shows that the full range of modes are being regularly considered in operational decisions.
- Road and Rail network investment and operational processes show significant engagement from the Freight Sector and broader industry.

4

Priority 2 – Enabling the transition to Net Zero

Government and industry will collaborate to:

- Create a Freight Energy Forum
- Support and promote mode shift
- Undertake a regulatory review of barriers to delivery of zero-carbon energy infrastructure
- Maximise the potential of modal initiatives by demonstrating a zero-carbon cross-modal freight journey
- Continue delivering the commitments outlined in the Transport Decarbonisation Plan .

The challenge ahead

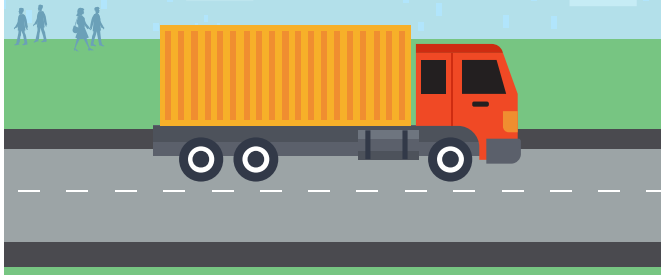
The challenge:

The UK's freight and logistics sector has opportunities to lead the world in developing a cleaner, and greener freight system . Continuing to invest in long-life assets can be difficult for industry whilst there remains some uncertainty around the precise mix of technologies and the delivery of associated energy infrastructure that will be needed . By working together, industry and government can build confidence order to accelerate the deployment of zero-emission technologies .

4.1 Transport is the largest contributor to UK domestic greenhouse (GHG) emissions, producing 99 MtCO2e of carbon in 2020[80]. The transition to zero emission technology is already well underway, particularly in our towns and cities. Increasingly sustainable forms of freight transport, including small commercial vehicles and e-cargo bikes, are already delivering goods and services sustainably. Zero-emission HGVs are currently available to purchase, with more and more coming to market, and our railway system already offers a greener means of transporting goods that will further decarbonise in future.

18 % [81] (or 19 .5 MtCO2e) of 2019 domestic transport greenhouse gas emissions (GHG) **came from HGVs**[82].

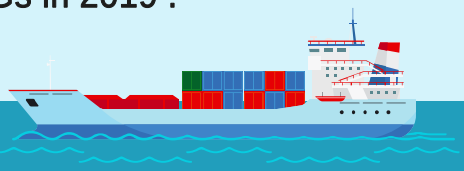
Current **CO2e emissions estimate** for an average laden HGV is **107 .5g per tonne kilometre** .[84]



HGV emissions reduced by 5% from 1990 to 2019[83].

Domestic Shipping emissions accounted for **5%**[85] **of UK GHGs in 2019** .

In 2018, international shipping accounted for around **3% of global anthropogenic CO2e emissions**[86].



Current **CO2e emissions estimate** for an average Container Ship is **16 .1g per tonne kilometre** .[87]

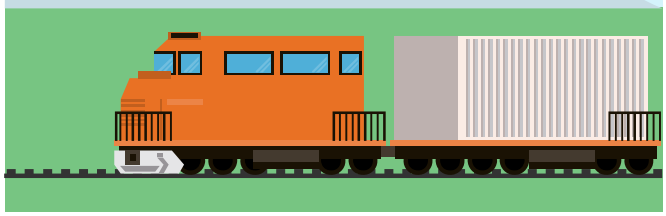
Current **CO2e emissions estimate** for a long-haul freight flight is **538 .7g per tonne kilometre,**[88]

but remains the most viable option for time critical goods.

Rail freight emitted **1 .8 Mt of CO2 in 2020**[89] **1 .4%** of UK emissions.

Current **CO2e emissions estimate** for a freight train is **27 .8g per tonne kilometre** .[90]

Rail freight trains currently emit around **1/4** of the CO2e emissions of HGVs **per tonne mile travelled** .[91]



4.2 Whilst much work has already been undertaken, some parts of the freight sector face challenges from the large energy requirements of long-haul HGVs, rail freight, aircraft and ships. Overcoming these is critical to meeting net zero by 2050.

4.3 Government and industry continue to make significant investments in R&D towards sustainable fuels and clean technology to meet our commitment to be net zero by 2050. For some of the freight sector, particularly the heavier and longer haul elements, further R&D is required into the fuels and technology of the future and the precise mix of technologies remains uncertain.

4.4 During the development of this plan, industry made clear their perception of a lack of transparency as to how a holistic assessment for provision of future energy and fuel infrastructure will be made for the freight sector. This includes opportunities for cross-modal synergies or inter-modal priorities, and how the freight sector will be able to inform these.

4.5 This is leading to investor uncertainty as they lack confidence that the energy infrastructure or supply network will exist, along with the concern that it will come at a disproportionately high cost. Recent energy price volatility is also adding to uncertainty on the long-term running costs of vehicles.

4.6 Freight businesses make investment choices in assets with long life-cycles, and will take decisions now and in the coming years for assets that may exist up to and well beyond 2050. Based on industry estimates, the operational life-span of an HGV can be up to 12 years, and rail freight locomotives, ships and aircraft often have an operational life of 25–30 years.

4.7 Energy infrastructure decisions are also long-term in nature and there is a clear need for further cross modal assessment of the upscale needed in fuel and electricity supply. There has been good work on the National Grid Future Energy Scenarios to explore energy demand in the future. However, it is still not clear what the future fuel/energy demand for the freight sector will be, and where there is evidence this represents a significant challenge. For example, government commissioned research estimates that the total annual electricity demand at UK ports could rise from 20 GWh in 2016 to around 250 GWh by around 2050[92], meeting this challenge will require significant industry and government collaboration.

4.8 As of today, zero-emission solutions require further research and development to be available for some of the freight sector and future fuel and energy demand is uncertain. For example, the most cost-effective mix of zero-emission technologies to power HGVs and trains is still unclear, as is to what extent the land-based freight sector will rely on low carbon fuels as

an interim technology and how quickly demand for these fuels in aviation and maritime might ramp up. Changes to both the demand and supply side will impact the infrastructure and supply chains needed to produce assets and produce and distribute the fuels and energy required to meet our climate targets.

4.9 In a sector with small margins, the freight industry have concerns about the risk of stranded assets and first-mover disadvantages creating a barrier to investment in new technologies. Therefore, industry and government must work together to build greater certainty and give private and public investors more confidence to invest in new assets, new energy/fuel generation, and supply and distribution.

4.10 This plan focuses on the transition to net zero; the core environmental challenge identified through our engagement. There are other environmental challenges that exist for freight and logistics, notably air quality, noise, biodiversity management and climate change adaptation that the planning regime (see chapter 5) and continual technological advances (see chapter 7) have a critical role in helping to assess and overcome. The broad range of activities taking place within those wider environmental areas are summarised within Annex A.

4.11 Despite this focus on net zero, it is important to recognise that reducing air pollution is a key consideration and co-benefit of the net zero transition and influences the adoption of future fuels and technologies. For example, only certain low carbon fuels (LCFs) will reduce exhaust emissions significantly, and emissions of particulates from tyre, brake and road-surface wear can only be overcome through technical design, innovation and by greater efficiency. Work to map out the freight sector's transition to net zero will need to align with government's air quality priorities.

Where are we heading?

Strategic goal:

To improve future energy mix and energy infrastructure planning certainty and to harness the efficiencies and synergies of a cross-modal approach to net zero in freight, while avoiding pitfalls such as stranded assets and disproportionately high first-mover costs .

4.12 Whilst significant steps have already been taken to transition towards zero-emission technologies, government recognises that challenges remain for freight, and will work closely with the sector to ensure that we overcome them. This plan sets out a vision for a sector that is cost efficient,

reliable, resilient, and environmentally sustainable. The transition to net zero in freight therefore needs to have these principles at the core.

4.13 Road, rail, waterborne, and air-freight operators can meet net zero and air quality targets cost effectively and efficiently without compromising the reliable and resilient critical services they provide, with costs borne across consumers, industry, and government.

4.14 Industry need confidence to make significant investments in freight energy infrastructure and new transportation assets, and the policy framework needs to ensure a degree of predictability and certainty. Further research and development is required to understand which zero emission technologies are best suited and most cost-effective for some types of freight transport.

Strong foundations

4.15 Government's *Transport Decarbonisation Plan (TDP)* (2021) contains ambitious commitments that put transport on a pathway to delivering carbon budgets and net zero by 2050, many of which have already been delivered or are in progress. The TDP includes freight as a core priority and has the following initiatives for freight (full details of the current policy landscape is included in **Annex A**).

Transport Decarbonisation Plan (TDP) Freight Overview

The TDP, published in 2021, included the following commitments and aims in relation to Freight (updates on progress on these commitments can be found in Annex A):

Cross modal

- Develop a strategy on the deployment of low carbon fuels across different transport modes in the period up to 2050.
- Support and encourage modal shift of freight from road to more environmentally sustainable alternatives, such as rail, cargo bike and inland waterways.

Road freight

- Consult on phase out dates for the sale of all new non-zero emission HGVs, to end the sale of new non-zero emission HGVs from 3.5 –26 tonnes by 2035, and all new non-zero emission HGVs by 2040.
- Demonstrate zero emission HGV technology on UK roads through investing £20m to develop cost-effective, zero emission HGVs and refuelling infrastructure across the UK.
- Support efficiency improvements and emission reductions in the existing fleet.
- Stimulate demand for zero-emission trucks through financial incentives.
- Support and encourage modal shift of freight from road to rail, cargo bike and inland waterways.
- Take forward measures to transform ‘last mile’ deliveries.

Rail freight

- A net zero railway network by 2050, with sustained carbon reductions in rail along the way.
- Ambition to remove all diesel-only trains from the network by 2040.
- Introduce a rail freight growth target –this should not become a ceiling.
- Incentivise the early take up of low carbon traction for rail freight.
- Build extra capacity on our rail network to meet growing freight demand and support significant shifts from road and air to rail

Maritime

- Consult on the appropriate steps to support wider deployment of shore power, including potential regulatory interventions, for both vessels and ports.
- Establish, after public consultation in 2022, an ambitious ‘Course to Zero’, helping the UK domestic maritime sector to reach net zero through indicative targets from 2030 and help the UK meet its net zero by 2050 target.
- Consult in October 2022 on the potential for accelerated decarbonisation through carefully designed, well-signposted measures to phase out the sale of new, non-zero emission domestic vessels in the UK.
- Accelerate the development of zero emission maritime technology and infrastructure in the UK via a £23m Clean Maritime Demonstration Competition and explore establishing a UK Shipping Office for Reducing Emissions.
- Explore economic instruments to incentive maritime decarbonisation.
- Extend support under the Renewable Transport Fuels Obligation (RTFO) to renewable fuels of non-biological origin used in shipping.

Aviation

- Consult on our Jet Zero Strategy, which will set out the steps government will take to reach net zero aviation emissions by 2050. Government will also consult on an earlier target for UK domestic aviation to reach net zero by 2040.
- Consult on the introduction of a UK Sustainable Aviation Fuel blending mandate from 2025 to accelerate the production and use of Sustainable Aviation Fuels in the UK.
- Continue supporting the development of new low and zero carbon UK aircraft technology through the Aerospace Technology Institute (ATI) programme.
- Develop the UK Emissions Trading Scheme (ETS) to help accelerate aviation decarbonisation.
- Work internationally and aim to agree an ambitious long-term global emissions reduction goal in the International Civil Aviation Organisation.

4.16 The TDP sets a very clear strategic direction, and government and industry have, and continue to, invest significantly to rise up to the huge challenge of meeting transitioning to net zero by 2050. Recent developments across the freight sector since the plan was published are further detailed below.

4.17 **Road freight:** Most freight is moved by vehicles on our roads. Government committed £20m in 2021/22 to support zero emission road freight trial feasibility and pave the way for future trials, Following that project, in May 2022 government announced the £200m Zero Emission Road Freight Demonstrator (ZERFD) programme. It will create an evidence base on which technology or technology mix is best suited to decarbonise the heaviest road freight vehicles (40–44t trucks) and address barriers to infrastructure roll out. Battery electric and hydrogen fuel cell competitions will be launched shortly[93].

4.18 The road freight industry has already made significant movements towards decarbonisation. There are increasing industry applications of low carbon fuels, including biomethane and higher blends of biofuels and drop-in fuels, and a focus on improving fuel efficiency via initiatives such as driver training, telematics, aerodynamic equipment and more efficient tyres. Truck platooning exists internationally and can potentially improve driving efficiency and reduce operational costs.

4.19 Zero emission light commercial vehicles are already delivering goods and services on our streets in increasing numbers with battery electric van sales in March 2022 up by 17.7% compared to March 2021[94]. Along with wider emerging innovative delivery solutions including e-cargo bikes, the last mile is being decarbonised, and will create greener, cleaner, more liveable places.

4.20 But much more is needed, and the UK is leading the world with its ambitions. Commitments are in place to reduce and remove the use of fossil fuels from road transport and to set achievable but ambitious phase out dates for every type of new non-zero emission vehicle. New non-zero emission HGVs are being phased out in the coming decades. At COP26 government announced that a phase out date for the sale of new, non-zero emission HGVs weighing 26 tonnes and under will be introduced from 2035 and that from 2040 all new HGVs sold in the UK must be zero emission. The government response to it's consultation on phase out dates, promised in the TDP, has been published[95], We have launched a call for evidence on potential exemptions to the 2035 phase out date for the sale of new, non-zero emission HGVs 26 tonnes and under[96].

4.21 As new vehicles continue to come to market, and with an increasing demand from businesses, this will have a significant effect on emissions savings. Prior to setting UK phase out dates, ACEA, the European truck manufacturer's association, had

already pledged to end the sale of fossil fueled HGVs by 2040 across the European market. Zero emission trucks are already entering the market. As of 2022, operators including Amazon and Tesco are deploying articulated zero-emission HGVs in UK operations. Sales of new zero-emission trucks are supported by the plug-in truck grant, with grant rates for eligible vehicles set at 20% of the purchase price with up to £25,000 of funding available for the largest HGVs[97]. Introduced in 2017, the number of vehicles eligible for the plug-in truck grant is rapidly expanding providing greater choice to operators. To date, the grant has supported the purchase of over 100 zero emission HGVs across the UK. Plug-in truck grant orders were nearly 8 times higher in 2021 than in 2020, demonstrating the growing appetite for these vehicles. This capability is transformational, and government will continue to support the development of the future options through the Zero Emission Road Freight Demonstrator programme.

4.22 Government recognises the importance of a widespread, reliable refuelling and recharging network to provide confidence in the commercial viability of zero emission HGVs. We will convene industry stakeholders to work together to develop a plan for zero emission HGV infrastructure rollout and the role of the public and private sectors to achieve this. The plan will build on data gathered through ZERFD and draw on the expertise of the Freight Council to set out how we can deliver a public refuelling and recharging network to support the swift and efficient uptake of zero emission HGVs.

4.23 **Rail freight:** Although 38%[98] of the rail network is electrified, only 5% of freight is currently transported using electric traction. Even on routes where the majority of the track is electrified, there are still lengths of track that are not and the practicalities of transferring from electric to diesel for part of the route as well as insufficient power supply mean that for many journeys, diesel trains are the preferred option. Whilst bi-mode trains, which can switch between diesel and electric traction along the same route do exist, there are currently only 10 (2%) of such locomotives in operation amongst four of the five major freight operators (purchased between 2015 and 2017 and operated by the then, Direct Rail Services)[99]. Similarly, electric locomotives currently comprise roughly 10% of these freight locomotives.

4.24 Further electrification of the rail network therefore remains the limiting factor for wider adoption, but this is not feasible on all parts of the network[100]. Fluctuating and high costs of electricity are also impacting freight operator's use of electric locomotives. It will therefore be necessary to deploy other technologies on some parts of the network, however the pathway for this remains unclear. There is therefore much focus in the rail freight sector on improving efficiency of existing stock, for example by maximising payloads, employing driver advisory systems and deploying stop start technology, to make interim carbon reductions. Low carbon fuels have also

been successfully deployed, such as hydro-treated vegetable oil (HVO) in rail freight diesel locomotives in advance of electrification, but cost barriers prevent wider use.

4.25 **Maritime freight:** Globally, carbon intensity improvements for international shipping to date have been driven by a number of factors, including through the International Maritime Organisation's (IMO) work on energy efficiency operational measures and improved design, and a move to larger ships.

4.26 We want the UK to be at the forefront of global decarbonisation, working with international partners to transform worldwide shipping. In March 2022, the government launched the UK Shipping Office for Reducing Emissions (UK SHORE) to tackle shipping emissions with £206 million to accelerate research and development of clean maritime technologies and skilled jobs through a clean maritime competition[101]. Electric and hybrid options are starting to be deployed in limited circumstances.

4.27 **Air freight:** It is critical that the aviation sector plays its part in delivering the UK's net zero commitment and the decarbonisation of air freight is inseparable from the wider challenge of decarbonising air transport as a whole. Through the Jet Zero Council, a partnership between industry and government, we are working to develop and industrialise clean aviation and aerospace technologies, including establishing UK production facilities for sustainable aviation fuels (SAF) needed to deliver net zero aviation by 2050. Our approach will be further highlighted in the Jet Zero Strategy, which we aim to publish later this year.

4.28 **Modal shift:** Modal shift from road to more environmentally sustainable alternatives continues to be a key part of the freight and logistics sector's decarbonisation strategies. With the increasing emergence of express rail-freight services, a shift from road to rail could also become more widespread for non-bulk cargoes.

£206m
to accelerate research and development of clean maritime technologies and skilled jobs

4.29 **New freight modes:** There have been recent developments in exploring new modes, notably underground freight systems being trialed or planned in Switzerland, Japan, Saudi Arabia, and British innovators including Magway and Mole Solutions are looking to develop UK based underground solutions. Drones have been used for specific small delivery applications, such as deliveries of medical supplies to the Isle of Wight successfully demonstrated during the COVID-19 pandemic. And as payloads for drones increase, wider applications may come to the fore. Mode shift to express rail-freight, e-cargo bikes or walking modes in the urban context is also increasingly common. However, road, rail, water, and aviation remain the core of the freight network.

4.30 **Low carbon fuels:** Over the last fifteen years, low carbon fuels (LCFs), supported by policy measures such as the Renewable Transport Fuel Obligation (RTFO), have been one of the main decarbonisation measures in transport. They include different liquid and gaseous fuels, such as biofuels or renewable hydrogen, which offer carbon savings compared to fossil fuels when looking at their whole life cycle. LCFs will continue to play a role as a transitional fuel in HGVs during the development and roll-out of zero tailpipe emission vehicles, helping to minimise carbon emissions from the existing conventional vehicle fleet. However, they are likely to be increasingly required in other freight modes where limited alternatives to liquid and gaseous fuels are available. Government are working with stakeholders to develop a longer term strategy for low carbon fuels, for publication in 2022. The aim of the strategy is to provide a vision for the low carbon fuels sector to maximise opportunities for greenhouse gas savings and provide more investment certainty. There are huge opportunities for UK production, both for current market participants and new entrants, building on existing skills, expertise and infrastructure available in the UK.

4.31 **Air quality:** Future of Freight has focused on the transition to net zero. However, the importance of delivering air quality standards and measures such as clean air zones means that these will have an impact on the technologies and fuels chosen by the sector to support the transition to net zero. Considerable progress has already been made across the sector in managing air quality emissions, for example, DPD's project Breathe has seen the deployment of over 400 air quality sensors across major cities, and ports in England handling excess of 1 million tonnes of cargo per year have developed port air quality plans[102]. Other cross-modal key environmental policy objectives are detailed in Annex A such as noise management and climate change adaptation.

Case study – powering the future of HGVs

Massive strides have been made over the past decades in the race to replace fossil fuels with environmentally sustainable alternatives.

Battery electric cars are becoming increasingly common on UK roads, however the precise technology mix to ensure all new HGVs are zero emission by 2040 is less certain.

Electric HGVs are already capable of performing some urban and interurban journeys, such as the Volta Truck –a fully electric vehicle that has a range of 95–125 miles, designed specifically for intercity use. Volta have partnered with West End of London property owners and will be trialing the delivery of goods to Regent Street retailers in the summer of 2022[103]. Zero emission HGVs are also performing more challenging duty cycles, with Tesco recently launching their first fully electric 37-tonne articulated HGVs. Capable of travelling around 100 miles. The lorries will transport goods from a rail freight terminal in Cardiff to a hub 30 miles away in Magor[104]. The success of these trials will see how additional electric HGVs could be rolled out in Tesco's fleet.

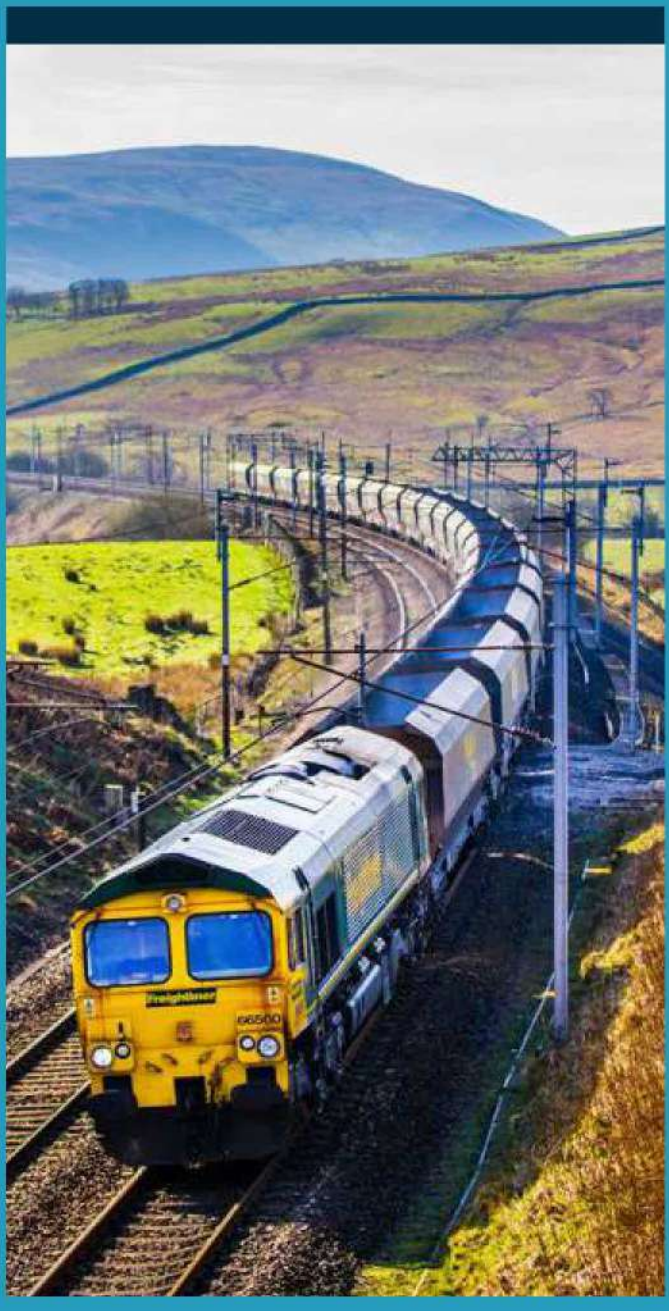
Electric roads –roads that have conductive or overhead charging, for example through electric power cables overhead that HGVs can attach to –may be an important technology. Electric roads allow HGVs to charge as they drive, enabling them to drive for longer without stopping to charge or to have smaller batteries on board. A six-mile trial e-highway was launched in Germany in 2019 and is now being extended, and a feasibility study looking at the UK situation is underway.

Looking beyond batteries, hydrogen fuel cells may also be a solution to long distance zero emission HGVs. An advantage of hydrogen is that it offers similar refuelling timeframes as existing diesel vehicles. However, use relies on there being hydrogen refuelling infrastructure. To this end, the Department for Transport is funding a feasibility study in the Tees Valley area considering the period 2025–2030, functioning across transport modes and capable of serving 12–13,000kg of hydrogen a day[105].

38% of the existing rail network is already able to operate at zero emissions[106]. Further to this, Network Rail's *Traction Decarbonisation Network Strategy* (2020)[107] defined plans for converting the remaining unelectrified rail to zero emissions. Although zero emission HGVs will be essential for achieving net zero by 2050, Government action to support modal shift and industry embracing rail will also drive emissions reductions.

38%

of the existing rail network is already able to operate at zero emissions



What next?

4.32 Government and the freight and logistics industry will continue to work together to deliver on the TDP, including taking forward committed large scale technology demonstrations and research and development programmes across all freight transport modes.

4.33 Through this Future of Freight plan, the focus will be on drawing together outputs of existing mode specific initiatives, such as the notable progress made for aviation via the Jet Zero Council, and for road freight through the Zero Emission Road Freight Trials, to identify areas of cross-modal opportunity for 'no regrets' investments that can be pursued as a priority for the freight system overall to de-risk future decisions.

4.34 Over and above the commitments already made by government and industry, the freight and logistics sector and government will work together on the following key activities:

Key activities for achieving a stronger Future of Freight

4.35 **Mode Shift support and promotion:** See Chapter 3.

4.36 **Freight Energy Forum:** By autumn 2022, sub-group of the Freight Council will be established to bring together cross-modal freight operators and users, manufacturers, energy infrastructure providers, fuel producers/suppliers, regulators and planning authorities. The role of this group will be to:

- Share energy/fuel infrastructure plans transparently to identify cross-modal opportunities or areas of collective priority for deployment.
- Continuously evaluate and share non-commercial outputs of technology or fuel trials and research in order to better inform future predictions for freight and logistics overall; as part of that, to form the best evidence base for interim decisions e.g. based on the outputs of the zero emission road freight demonstrations, and what those means for all modes.
- Engage with the development of the National Freight Network and how planning for energy/fuel infrastructure can be factored into this as well as explore options to support the deployment of higher blends of biofuels.
- Ensure freight has a role in developing and responding to wider government fuel, energy and air quality strategies and planning reform.
- Seek to maximise funding opportunities for freight energy and fuel infrastructure deployment e.g. through the UK Infrastructure Bank.
- Explore regional and local disparities in the coverage of freight energy infrastructure and specific actions to address them.

4.37 **Regulatory review:** Through the Freight Energy Forum, government will conduct a freight and logistics specific review of the energy regulatory barriers to implementing new fuel / energy infrastructure for the freight sector, including disadvantages to first movers, as well as adapting existing infrastructure. The outputs of this review will contribute to the planned regulatory review by Ofgem, planning reform opportunities, where applicable, and any future review of incentives.

4.38 **Demonstrate net zero cross modal journey(s) and intermodal hub(s):** Explore the potential to demonstrate an end to end net-zero cross-modal freight journey including zero-emission intermodal hub. As we support the establishment of green shipping corridors under the Clydebank Declaration, take forward the Zero Emission Road Freight Demonstrator programme, complete clean maritime demonstration projects, establish maritime clusters, and as rail freight R&D continues to develop, government and industry will explore the potential to join-up these initiatives to demonstrate cross-modal synergies for energy/fuel infrastructure across key freight route(s) and/or priority inter-modal hub(s). This could be a means to de-risk wider freight energy infrastructure decisions

National Infrastructure Commission (NIC):

These actions directly builds on the NIC's recommendations and expert advice to undertake detailed analysis of the future energy infrastructure needs of the sector to support decarbonisation of road and rail freight and to ensure freight is properly incorporated into the upcoming Ofgem review (see Annex B) .

Achieving our Future of Freight vision

The above key activities will deliver a sector that is:

Cost efficient	By providing greater investor certainty to allow the timely and best value replacement/conversion of fossil-fuelled assets and by seeking to look at future fuel and energy demands holistically so no one part of the sector bears the cost.
Reliable and Resilient	Timely and effective transition with a focus on the cross-modal network to zero carbon freight will minimise costs and physical disruption to that network and not consume resources that might be targeted at resilience.
Environmentally sustainable	By creating greater certainty for the sector to make the investment in the assets and supporting infrastructure necessary for making net zero 2050 a reality.
Valued by society	By being able to demonstrate and share clear progress on the pathway to net-zero to help sustain a positive public perception of the sector.

We will succeed when:

4.39 Government and industry will know we are making progress against this priority as already set out in the TDP, when we realise the following desired outcomes:

- Reduction of emissions of CO2e/tonne km, with net zero by 2050. The current baselines (2021) government will be measuring improvement against are:
  - Road freight: 107.5g CO2e per tonne kilometre
  - Rail freight: 27.8g CO2e per tonne kilometre
  - Aviation emissions: 538.7g CO2e per tonne kilometre
  - Maritime emissions: 16.1g CO2e per tonne kilometre –the outcome of the course to zero consultation will be setting indicative (non-binding) targets for domestic maritime emissions.
- An increase in the share of non-road freight traffic. Government will be measuring increases in rail and water modal share of freight moved against the 2019 domestic baseline of road freight 79%, rail 8%, and water 13%[108]. Government will also shortly consult on a rail freight growth target as part of this ability to measure success at delivering a more sustainable modal share
- Sector engagement undertaken by the Freight Energy Forum, shows increased confidence in energy infrastructure provision and the route to net zero.

5 Priority 3 – Planning

Government and the freight and logistics sector will:

- Work with the sector to support a programme of engagement with local planning authorities
- Review and amend Planning Practice Guidance
- Publish a freight specific call for evidence to understand what is working well and not so well
- Consult on updated guidance for Local Transport Plans
- Engage with the review of National Networks National Policy Statement
- Engage with the Planning Reform programme

The challenge ahead

The challenge:

A disconnect exists between an industry that is not equipped to properly engage with the planning process, and local planning authorities that are unable to understand the needs of a changing an innovative freight and logistics sector. This leads to increased complexity, cost and time for promoters bringing forward schemes that are in the national interest.

5.1 The planning system has a crucial role in promoting development that supports the efficient supply of goods. To achieve this, the planning system needs to ensure that sufficient land is being made available in the right places for freight operations and that it is able to respond to the changing needs of the freight and logistics sector such as how to plan for the adoption of future vehicle technologies. There is a clear role for the planning system in ensuring the country has a freight and logistics sector that is economically efficient, reliable, resilient, and environmentally sustainable and can meet current and future needs.

5.2 As set out in the **levelling up** section of Chapter 2, the freight and logistics sector is growing faster than the economy, providing more employment in more highly skilled sectors. Chapter 3 sets out that this growth must be seen across a multi-modal network that requires all parts to be working well to achieve our objectives. Chapter 4 highlights the very specific challenge that Net Zero poses for freight and Chapter 6 draws attention to the importance of access to the right mix of people with the right skills for the sector to thrive. Chapter 7 illustrates how the sector is innovating with new technology and operations.

5.3 Strategies for decarbonisation, responses to growing demand and the integration of new technologies for freight all have implications in the built environment, and therefore rely on the planning system to operate in a way that can support the Government's levelling up agenda. Across 19 key industrial and logistics markets in England, demand for space was found to be above the supply of available land and floorspace in each area[109]. With productivity in the sector expected to grow by 29% by 2039[110]. The planning system will be key to enabling the growth and innovation of the freight sector to better meet current and future challenges. By ensuring the planning system can be more responsive to the needs of the sector, and industry can be more engaged in planning, freight will be able to secure sufficient land of the right type in the right places and at the right time to support growth, innovation and improved productivity with the appropriate accompanying infrastructure.

5.4 Ensuring there is a joined-up approach between the planning system, local authorities and industry, can safeguard and prioritise the land needed for these uses. Sites that support freight activities like ports, lorry parks, refuelling stations and infrastructure, as well as distribution centres often require large amounts of land and need to be strategically located near transport links. They operate across local authority boundaries and use the local and national transport networks to move goods.

5.5 When planning policies and decisions do not adequately consider the freight industry's needs, it can impact other transport network users and local communities negatively, making consent for schemes more challenging to obtain, often leading to significant delays to decision making and reducing the level of certainty for applicants, investors and communities. This increases the uncertainty of delivering development associated with freight and logistics, actively discouraging promoters from bringing forward schemes and can lead to sub-optimal outcomes. All of these considerations can be better met through better collaboration between industry and local authorities supported by an agile and responsive planning system.

Where are we going?

Strategic goal:

A planning system which fully recognises the needs of the freight and logistics sector, now and in the future, and empowers the relevant planning authority to plan for those needs .

5.6 The planning system can help to facilitate the needs of the freight and logistics sector. From national policy and guidance to the local plan making and decision taking, the system can help to allocate land in the right places to support the economy, which includes the freight and logistics sector, to ensure sufficient land is available to meet their needs now and in the future. Existing freight provision needs to be appropriately supported and can expand, adapt and innovate including for the rollout of new technologies to decarbonise freight end-to-end.

5.7 The freight sector and logistics industry should be confident in engaging and working with local planning processes, so local planning authorities are empowered to understand their development needs. Developers and operators should work collaboratively with local authorities and properly engaging with all stages of the planning process to secure better outcomes.

5.8 The freight sector relies on different modes of transport to move goods and this means the planning system needs to make land available for the receipt, storage, processing, interchange and distribution of goods. We need a supply chain network that is secure, predictable, reliable, and resilient with no link in that chain overlooked, including the need to provide the right high-quality facilities and infrastructure required to support freight and logistics workers. Local planning and highways authorities have a crucial role to play in planning for delivery of the right infrastructure, where it is needed and at the right time, to support the sector.

Strong foundations

5.9 *The National Planning Policy Framework (NPPF)* (2021) sets out that the purpose of the planning system is to contribute to the achievement of sustainable development. Achieving sustainable development includes an economic objective – to help build a strong responsive competitive economy.

5.10 Local planning policies and decisions are expected to help create the conditions in which businesses can invest, expand and adapt. The NPPF makes clear that planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of industries, and for storage and distribution operations at a variety of scales and in suitably accessible locations.

Planning policies should also provide for large scale transport facilities, located in areas of need, which include interchanges for rail freight. The NPPF also makes clear we already expect planning policies and decisions to recognise the importance of providing adequate overnight lorry parking facilities, taking into account any local shortages.

5.11 The suite of transport National Policy Statements set out the need and strategic planning policy for National Significant Infrastructure Projects (NSIPs), recognise the importance of our ports, roads, and rail network in the movement of freight including, where applicable, in delivering modal shift through provision of strategic rail freight interchanges.

5.12 In 2021, the Department for Transport made a Written Ministerial Statement with the Department for Levelling Up, Housing and Communities, which made clear that in preparing local plans and deciding planning applications, the specific locational requirements of different industrial sectors should be recognised and addressed by local planning authorities. The Written Ministerial Statement also committed to review how freight is currently represented in the Planning Practice Guidance and to update DfT Circular 02/2013 'The Strategic Road Network and the Delivery of Sustainable Development' to fully reflect the importance of providing logistics and freight.

5.13 At the heart of the government's ambitions for an improved planning system is more use of environmentally sustainable transport modes and a decarbonised transport network. The Transport Decarbonisation Plan was clear in its ambitions for a zero-carbon freight sector and whilst freight currently relies on carbon intensive forms of transport to move goods, the development of the technology to decarbonise these transport modes is accelerating. It is important that the planning system recognises this. To capture this, government will ensure that planning policy keeps pace with technological advancements such as for electric vehicles, low carbon fuels across transport modes and autonomous vehicles.

5.14 The crucial last mile of the supply chain for freight is becoming an increasingly important issue in planning. As people work more flexibly and more goods are delivered to people's homes during the day (and night), the local transport network will be forced to work harder to accommodate this.

Case study – urban logistics and last mile

The final leg of the journey that sees goods either delivered to shops to be sold or directly to homes –known as the ‘last mile’ –has had to adapt significantly. Meanwhile local authorities are having to ensure these changes in usage patterns are reflected in planning and street design considerations.

Whilst much of the final leg continues to be delivered by Light Goods Vehicles, innovative delivery solutions have been deployed to aid this change.

In dense urban centres, e-cargo bikes have become an increasingly common sight and are being encouraged by supportive local authorities across the country. Most notably the City of London is using its planning powers and partnering with a logistics company to lease underutilised space in it’s car parks to deliver the necessary consolidation and logistics hubs required to support e-cargo delivery[111]. Whereas in 2020, when the Isle of Wight was operating strict no-travel policies, drones were been tested to deliver goods to the NHS with further trials now ongoing[112] and all supported by a forward thinking Civil Aviation Authority.

There are also innovative plans being developed to reduce the length of ‘last mile’ journeys by getting goods closer to population centres, with Leeds City Council recently giving full planning permission to a scheme to use rivers and canals to transport goods from North sea ports directly to Leeds city centre[113].

A particularly innovative last mile solution is being trialled in Milton Keynes where, since 2018, a fleet of autonomous robots have been helping fulfil the last mile across the city through zero-emission technology. Starship Technologies, who have launched their robots in over 100 cities across the world, have worked in partnership with Milton Keynes council in their trial of roughly 200 robots that can be called on-demand through an app.

For a delivery fee of roughly £1.60, the robots will move at roughly walking pace along pavements, through rain and snow, to deliver small cargos of supermarket groceries. Since 2020, the number of journeys made by the robots has risen significantly, with Starship’s deliveries quadrupling[114] and new announcements to expand the fleet coming regularly.

The final leg of deliveries will need to continue to undergo major changes in order to hit the UK’s ambitious climate targets, reduce congestion and air pollution and support changing consumer demand. Innovative solutions such as those in the City of London, Isle of Wight, Leeds and Milton Keynes point the way forward and show the transformative impact innovators, partnering with supportive local authorities and public sector organisations can have on the ‘last mile’ and local residents experiences of logistics.

What next?

5.15 We have a suite of national planning policy and guidance tools that can support the provision of development that meets the changing need of the freight and logistics sector. Setting a clear and unambiguous case for the end-to-end needs of freight and logistics that can be taken account of in all stages of plan-making and decision taking. This includes considering the role the establishment of the National Freight Network could eventually play in planning for freight.

Key activities for a stronger Future of Freight

5.16 **Planning Practice Guidance:** As set out in our response to the National Infrastructure Commission and in the 'Lorry Parking' joint Written Ministerial Statement published in 2021, government will take forward work to review and where appropriate amend planning practice guidance to better support freight and logistics.

5.17 **Call for evidence:** government need to fully understand what currently works and doesn't work for freight and logistics. This will allow us to put in place targeted interventions in the right places to realise the best outcomes. To ensure government understand the practical issues of planning for and delivering the right infrastructure to best support the freight and logistics sector, government will publish a call for evidence by autumn 2022. This will help us build a comprehensive picture of where the planning system can appropriately support the freight and logistics sector, including understanding what is working well, what could work better and how government can promote best practice. This call for evidence will recognise that the planning needs of the freight and logistics are wide ranging and complex. It is unlikely that single intervention would address all the needs of the sector, but equally there is a need to recognise that government has a part to play in realising a better future for freight, –from the role of central government and of local authorities, to the key role the industry must play in addressing the challenges we face. There is a range of measures that could be taken, dependent on what support is needed. This could include updates to national planning policy that would be implemented as part of our programme of changes to the planning system, and updates to planning practice guidance.

5.18 **DfT Circular 02/2013:** Government will consult on and publish an updated DfT Circular later in 2022 including higher standards for roadside facilities on the strategic road network so that government can provide better facilities for HGV drivers. This will build upon the Written Ministerial Statement published with the Department for Levelling Up, Housing and Communities, which made clear that in preparing local plans and deciding planning applications,

the specific locational requirements of different industrial sectors should be recognised and addressed by local planning authorities.

5.19 **Local Transport Plan guidance:** Government aims to consult on and update guidance on Local Transport Plans by the end of 2022. Local Transport Plans play an important role in setting the transport priorities of any local highway authorities jurisdiction, and contribute key evidence in local plan making. By updating the guidance for Local Transport Plans, government will ensure that freight needs are key considerations in Local Transport Plan-making.

5.20 **National Policy Statements:** Through the current review of the National-Networks National Policy Statement (NNNPS) –which government aims to complete by Spring 2023 –government will consider the growing importance of major freight schemes to our economy, particularly the increasingly important role of strategic rail freight interchanges (SRFIs) and the interdependencies between different transport hubs along the supply chain. Whilst no decision has been made to review the Airports and Ports National Policy Statements, government will continue to assess the need to review in line with the requirements of the Planning Act 2008. If appropriate, the role and future of freight in these transport contexts could be considered as part of any such review.

5.21 **Consolidation centres:** As the NIC set out in *Better Delivery: The Challenge for Freight* (2019), consolidation centres could reduce emissions and freight trips into congested areas. Government continues to research the effectiveness of consolidation centres, and if proven effective, government will explore opportunities to establish a national planning policy position for consolidation centres so that they can be properly recognised within the planning system.

5.22 **Manual for Streets and National Model Design Code:** As government plans new developments, it will increasingly need to think about how more deliveries and servicing can be safely accommodated to discourage inappropriate parking. Through potential updates to the National Design Guide, Manual for Streets, and National Model Design Code, government will explore the role that street design can play in driving up standards for delivery and servicing arrangement in all developments. Government will also consider the need to ensure the planning system can support innovation and technological advancements to each stage of the supply chain, including ensuring the right infrastructure is in place to support zero carbon transport.

5.23 **Communication and engagement:** A collaborative approach between national and local government and the freight industry and developers will support effective delivery within the planning system. Government will work with the sector to support a programme of

engagement with local authorities. This will provide planning officers with an understanding of the wider economic benefits of freight infrastructure, the environmental impacts, provide specialist training and give considerations to options to strengthen their capacity. Government will also seek to address capability and capacity issues across the sector from developers and operators alike so as better to engage with all stages of the planning system to secure better outcomes.

5.24 **Programme of changes to the planning system:** The government recognises the need for a modernised planning system –one which embraces digital technology, benefits communities and creates places in which people can take real pride. An integral part of reviewing any changes to the planning system is considering how they align with and support the government's wider mission to level-up the country and regenerate left-behind places. The call for evidence will enable us to understand what changes to the planning system will mean for the freight sector and will give us the opportunity to consider appropriate interventions to support the land use needs of the sector are needed, including:

- How best to consider the needs of a National Freight Network within planning
- How the requirement for HGV parking can be better facilitated within the planning system, particularly at freight sites such as distribution and logistics centres along with the better utilisation of existing infrastructure to accommodate HGV parking.
- How to best promote delivery of development of edge of centre urban consolidation centres to facilitate modal shift to environmentally sustainable transport options including how to better utilise urban rail freight interchanges.
- The lessons learnt from the Future of Transport initiatives, and better understand how the planning system can support government commitments in the Transport Decarbonisation Plan and Gear Change, to facilitate modal shift to more sustainable transport options, decarbonise our transport network, deliver the infrastructure needed to assist a transition to alternative fuel and energy sources, and act as an enabler for sustainable patterns of development for the sector.
- Improvement opportunities identified through the *Union Connectivity Review* (2021).
- Options to ensure sufficient land is allocated to service the needs of freight and logistics including ensuring we deliver a resilient network of lorry parking facilities and ensure planning authorities recognise the land use requirements to support each stage of the supply chain.
- The role our Sub-National Transport Bodies, Highways and Transport Authorities can play in better aligning

transport and spatial planning, sharing data and foster greater collaboration and cooperation across local authority boundaries (including between upper tier and lower tier authorities) to reflect the needs of the freight sector and identify improvements to the local transport networks can play in supporting the seamless movement of goods.

- How the planning system can support the needs of 24hr freight movements and technological advances, including night time servicing arrangements without compromising the planning system's role to uphold environmental standards and preserve amenity of communities. This will build on evidence accumulated from relaxation of night-time delivery restrictions during the COVID-19 lockdown.

- How the planning system can support port diversification and expansion, including around our new freeports, to reduce the need to move goods for processing and to ensure they are serviced by a transport network sufficient to meet their needs, reduce congestion and promote innovation.

Building on the National Infrastructure Commission (NIC):"

These actions directly build on the NIC's recommendations and expert advice to "Manage Congestion" and ensure "Better Planning to enable optimisation" (see annex B for further detail) . The above actions to consult on changes to the planning system, planning guidance, local transport plan guidance and other design codes will help to ensure that the needs of freight and logistics are fully considered in the planning system and that the sector and planning authorities strengthen their relationship .

Achieving our Future of Freight vision

The above key activities will deliver a sector that is:

Cost efficient	Successful planning applications mean freight infrastructure and operations are sited where they need to be supporting the wider efficiency of the system.
Reliable and Resilient	An industry with infrastructure and operations where they are needed will support the reliability and resilience of the whole freight system.
Environmentally sustainable	Access to land and appropriate land-use will support the development of infrastructure and support optimisation of journey distance to support transition to Net Zero.
Valued by society	Better communication about the value of freight to local economies to support planning applications and build capability in local planning authorities.

We will succeed when:

- There is an increase in site allocations for freight and supply infrastructure being adopted in Local Plans to reflect the needs of the sector, alongside more robust and agile policies, where needed, to meet specific local needs.
- Planning authorities are more aware of freight industry needs when devising planning policies and are making planning decisions that pro-actively plan for and speak to the change needs of the sector.
- Members of the freight and logistics industry are engaged in planning policy processes and are aware of the appropriate planning consent mechanisms.
- Better sharing and communication of data between industry stakeholders, and transport authorities, sub national transport bodies and local planning authorities is being used to underpin local evidence bases and is being effectively used to support plan-making and decision-taking.
- A package of training and a communications strategy has been developed and is routinely being used by the freight and logistics industry and local planning authorities to better communicate and engage with the needs of the sector and how best to engage with the planning system.

6

Priority 4 – People and Skills

Government and industry will collaborate to:

- Deliver Generation Logistics campaign in 2022 .
- Ensure the Transport Employment and Skills Taskforce meets our future skills needs in freight and logistics .
- Support a programme of employer engagement
- Reform Freight and Logistics training offers to encourage transferable qualifications .
- Support efforts to boost diversity within the sector .

The challenge ahead

The challenge:

IImmediate and future skills shortages across the sector could undermine resilience of UK supply chains. There is a need to: Produce a pipeline of talent across the freight sector by improving the training and employment options; addressing awareness and negative perceptions of the industry; and promote the availability of attractive, fulfilling jobs at all levels of the industry.

6.1 The freight and logistics sector supports our supply chains and is vital for the economy. Brexit and COVID-19 have highlighted the importance of supply-chains and its workforce over the past two years. As we saw with the Heavy Goods Vehicle (HGV) driver shortage, getting people in place with the right skills is key to not only resilience in the sector but also the economy as a whole. Whilst we had a short-term issue, it stemmed from a longer term one – and this is our focus. Government and industry are doing a lot to attract people into the sector, and industry in particular, is exploring how to ensure they stay, but there is more to do in this area.

6.2 As we emerge from the pandemic, the UK economy is growing and businesses are seeking more skilled and semi-skilled employees. There is increasing demand, and in the three months to January 2022 there were almost 1.3m unfilled vacancies in the UK across all industries[115]. Many sectors of the economy face recruitment challenges and some must also grapple with a demographic challenge as the workforce ages. For logistics businesses, this is exacerbated by the fragmented nature of the sector and the lack of awareness of the range of careers available within logistics. For a number of years, some parts of the sector have struggled to attract new recruits and retain those working in it, relying on agency staff and foreign labour to manage periods of high stress. The reasons are diverse and include rates of pay, standard of working conditions, anti-social hours, lack of transport to sites, perceived lack of career development opportunities, and lack of diversity[116].

6.3 The HGV driver crisis, for example, has brought the ongoing workforce shortages in the sector into sharp focus. However, the importance of our logistics sector across rail, maritime, aviation and warehousing are equally significant and there is growing evidence of significant difficulties recruiting and retaining staff across the sector[117]. Across Transport and Logistics, ONS evidence points to a significant ongoing surge in job advertisements, indicating Industry having many vacancies to fill[118].

6.4 Transport and logistics businesses have noted skills challenges around the skills supply pipeline and role retention. There are 30,000 new HGV test passes per year but this figure is offset by workers retiring, with a disproportionate percentage of the HGV workforce from older age groups[119], and quitting HGV driving for a living. In 2020–21 there were 39,000 fewer HGV drivers employed in the UK than in 2019–2089 This challenge is compounded by a struggle to retain staff and timescales needed to train new staff.

6.5 There is limited understanding on the future skills mix and what government needs to do to support industry to address future skill gaps. Government and industry need to work together to close this gap and consider what is necessary to build the workforce for an increasingly digitised and automated workplace.

Strategic goal:

Industry, with government support, will lead on ensuring the freight and logistics sector will be seen as an industry of choice for a diverse group of talented and skilled people at all stages of their career and will have the people and skills that it needs to thrive .

Where we're going

6.6 To improve resilience of the supply chain and the reliability and cost efficiency of the freight and logistics sector, we must improve the labour market for the sector –this will require Industry working to fully understand and overcome barriers, with government partnership through existing programmes including Road to Logistics which is supporting military service leavers, ex-offenders and the long-term unemployed, and Think Logistics working with young people to change the perception of the industry and highlight the many career opportunities that exist.. There will be clear areas where industry will need to take the lead in ensuring the labour market for the freight sector meets the needs of the economy, and clear areas where government can act to support industry. By adopting a partnership approach, we will ensure we have a clear and holistic overview of the key challenges and action that is needed to overcome them. By adopting a partnership approach, we will ensure we have a clear overview of the key challenges and action that is needed to overcome them.

6.7 The above goal will be achieved by:

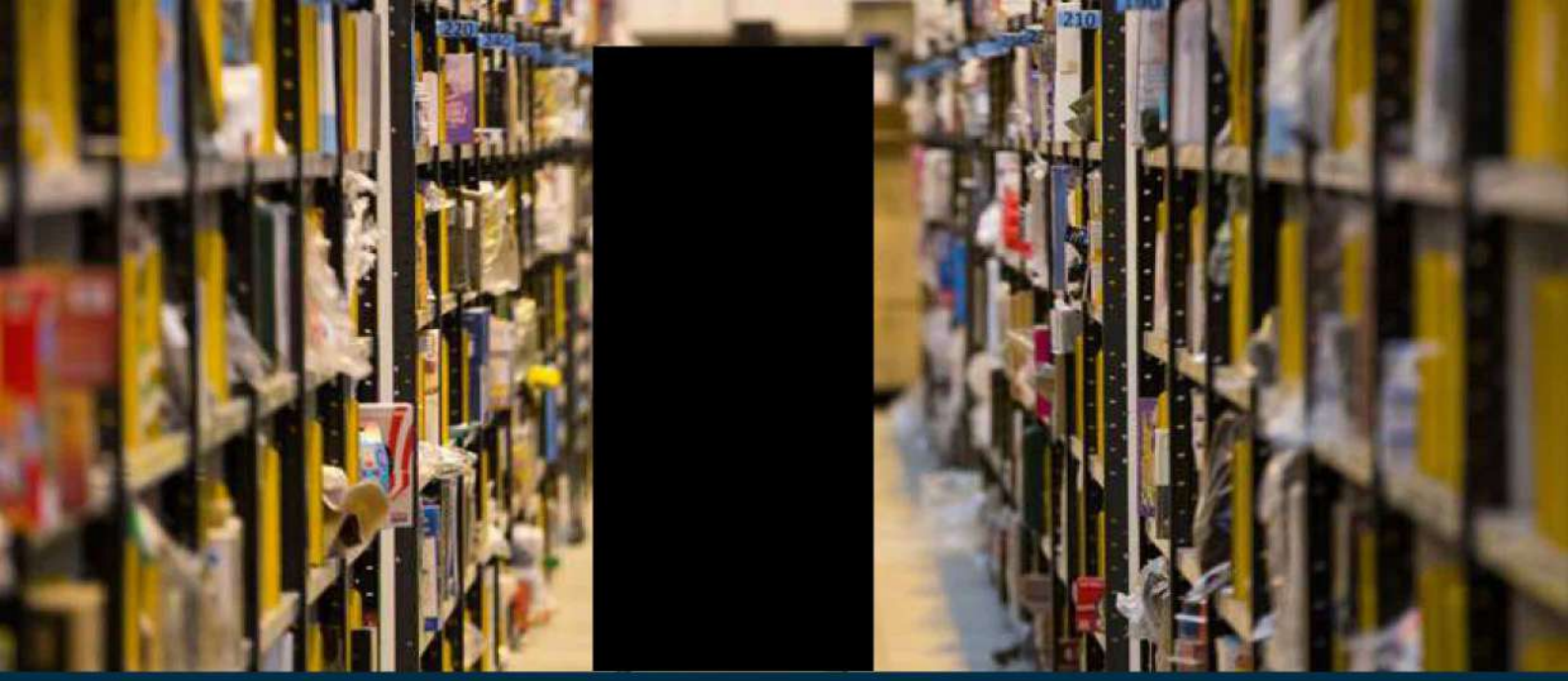
- Raising and maintaining awareness of the range of roles and career options within the sector
- Industry working to ensure fair wages and higher welfare standards for workers across the sector
- Identifying and removing barriers to accessing, remaining, and progressing in the sector for any part of society, with government supplementing this through its existing programmes.
- Provision of readily accessible qualifications that are transferable across the industry and match industry needs

Strong foundations

6.8 DfT and other departments across Whitehall have a wide range of initiatives either specific to the sector or focused on wider skills development, which bring benefits to the sector. Freight and logistics skills and people initiatives already in place are covered in Annex A.

6.9 Good progress has already been made to address key barriers contributing to the HGV driver shortage, as well as understanding the future workforce needs. The interventions undertaken demonstrate that to address working conditions, skills, recruitment and retention issues it is necessary to understand the full spectrum of barriers and identify interventions to address each. This comprehensive approach will be adopted more widely across the whole of the freight and logistics sector.

6.10 Whilst recruiting and retaining workforce is an Industry responsibility, Government recognises the importance of working together with the freight and logistics sector to ensure it is creating a conducive regulatory environment and that its existing skills and training initiatives to facilitate the sector to secure the workforce it needs for the future. The HGV driver shortage is a good example of industry and government collaborating to address a specific labour force challenge within the sector.



Case study – improving diversity and addressing workforce shortages

One of the most dominant headlines from 2021 was about labour shortages in key roles in logistics, specifically the HGV driver shortage. However, whilst drivers are the best publicised shortage, the inability to fill roles is an industry-wide problem, with software engineers, project managers, and executives being listed by industry as the hardest roles to fill.

Logistics firms cite the main barriers to recruitment as a lack of job-specific skills, lack of work experience schemes, as well as acknowledging that low wages contribute to recruitment issues.

Beyond these problems, however, the profile of the average logistics worker may factor into the difficulties the sector is facing. For one, the median HGV driver is 55, and an *LMI for All* (2019) report found that 49.2% of the workforce set to retire by 2027 , indicating that the driver shortage and related phenomena may, without intervention, get worse before they get better.

Additionally, the sector has a highly male-dominated workforce, and this severe gender imbalance arguably contributes to the difficulty in filling roles. For direct freight operators, less than 1% of HGV drivers are women, and whilst women only amount for 4.2% of rail drivers in the UK, they are an even smaller slither of freight rail drivers at 1.4% .

Historically a male-dominated workforce, the image of a 'boys club' is likely perpetuated by the demanding hours of the job, the requirement to be away from home, and the lack of facilities for drivers. These factors have been much cited in the press during the driver shortage as a general barrier to entering the industry, however these are likely to be especially pertinent for women due to the disproportionate split of caregiving, unpaid home labour, as well as safety concerns.

The gender gap goes beyond the driver's cabin, however, and in all UK transport companies with over 250 employees there

is a pay gap of 10.4% and 75% of women surveyed believed it was easier for men to progress in their career compared to women.

Aiming to offer career support, mentoring, and networking opportunities for women in the industry are groups such as Women in Rail and Women in Transport, that also seek to host discussions to address the systemic gaps in the industry.

Beyond the gender gap, the sector is also disproportionately white. A 2016 House of Lords paper found that only 3% of the haulage workforce were from black and minority ethnic backgrounds – around four times below the national population. Amongst bus drivers, however, 19% of the national workforce are from BAME backgrounds – suggesting that there may be specific barriers within the logistics sector to those from non-white backgrounds.

Any sector that is failing to recruit from the entire population is more likely to run into labour shortages. For an ageing sector that is struggling to fill roles, it is natural to think about the workforce of the future. And for logistics, perhaps the future sector will need to aim to recruit from a wider range of backgrounds.

6.11 Recognising the importance of ensuring there is dedicated focus to address workforce challenges for the sector, DfT has appointed a workforce lead who is responsible for working with industry to support them to address labour market shortages, ensuring appropriate government levers are available as well as the joined-up focus of industry. To better understand the skills gaps, the Education Secretary is establishing a new Unit for Future Skills which will look at the data and evidence of where skills gaps exist and in what industries.

6.12 To bring all our work on skills together and tackle skills gaps head on, DfT published in February 2022 a Transport Labour Market and Skills Call for Views and Ideas, which sought information on the key labour market and skills challenges across the entire transport sector, including freight and logistics[120]. It sets out fours cross cutting themes and five proposed 'pillars' that DfT and industry will work together in tackling. The freight and logistics sector will feature in each of the five 'pillars' identified:

Cross-cutting themes

- Developing the transport workforce and a pipeline of talent to meet the net zero challenge.
- Supporting growing and levelling up the economy by supporting local labour markets across the country.
- Enhancing the transport sector's global competitiveness.
- Building a diverse and highly skilled transport sector.

Preparing for future skills

Challenge:

To drive a shared understanding of future skills needed across the sector and identify actions to ensure skills and employment programmes can meet those needs.

Improving training and employment

Challenge:

To map routes into training and employment in the transport sector, identify barriers and opportunities to overcome them, and to identify and share best practice.

Promoting careers in transport

Challenge:

To understand current perceptions of the industry, and create a programme of comms and engagement to promote careers across transport.

Boosting diversity, inclusion, and social mobility

Challenge:

To understand the drivers of the lack of diversity across the transport sector. To identify barriers to D&I & social mobility, and look for opportunities to overcome them.

Building evidence and evaluating progress

Challenge:

To improve the evidence base across the other pillars and wider labour market and skills issues, and measure and evaluate progress.

6.13 DfT has also created a new industry-led taskforce, the Transport Employment and Skills Taskforce (TEST), which aims to respond to the challenges of future skills and training required in the transport sector. TEST will work in partnership with industry to fill evidence gaps and ensure that future policy interventions are tailored to meet our future skills needs across the whole transport sector, including haulage and logistics.

6.14 TEST will consider the barriers and opportunities to developing skills and careers across the transport sector and suggest an approach as to how industry, with government support, can tackle them. Informed by the responses to the consultation, these five pillars will set the direction for the work of the Taskforce. The Taskforce and DfT will work with other key partners to develop and refine the programme in this area to support the transport sector in developing and accessing a skilled pipeline of talent as government builds back better from the COVID-19 pandemic and build a transport system fit for the future.

6.15 This builds on the 2016 *Transport Infrastructure Skills Strategy (TISS),* that set ambitions to increase the number of apprenticeships in road and rail client bodies to help address skills shortages and established the Strategic Transport Apprenticeship Taskforce (STAT).

6.16 To improve learners' understanding and awareness of their careers options, government is delivering our commitment in the Skills for Jobs White Paper to improve both local and national alignment between the Careers & Enterprise Company (CEC) and the National Careers Service to create a clear, all-age careers system, ensuring that this incorporates freight and logistics career options.

6.17 Good progress has been made with the provision of apprenticeships within the sector. However, there remain calls from industry for the Apprenticeship Levy and the system to be more flexible so it works for the sector. The levy was created to support the uptake and delivery of high-quality apprenticeships. DfE are making it easier for levy-payers to spend their levy funds on the training they need to develop skilled workforces, including through encouraging more flexible training models such as front-loaded and accelerated apprenticeships. Employers can also continue to access a range of other government-funded skills programmes including traineeships, T Levels, and Skills Bootcamps.

6.18 Department for Work and Pensions (DWP) has a Schools Adviser Network that provides vocational support for young people in schools and other educational settings, demand for which is channelled through the Careers and Enterprise Company (CEC). DWP's Way to Work initiative helps to boost the economy by filling entry level roles more quickly and efficiently. DWP will continue to work with employers in a range of sectors, including logistics and freight, to understand the different role requirements for their vacancies.

What next?

6.19 For many years, logistics has been supporting the UK's economic growth and development. The sector is a world leader in this space, and the unsung heroes who work in this sector have facilitated the rapid growth of large high street retailers, grocers, and online stores. In the last 20 years the industry has embraced new technologies to support an efficient and highly adaptable service. Since the pandemic, we have seen a change in consumer behaviour, with a shift to home retail and a growing demand for just-in-time goods and services. The sector has responded effectively to this, demonstrating its flexibility and ability to adapt to complex IT tracking, scheduling and warehousing systems that have satisfied consumer demand and made next day home delivery possible for a vast array of products.

6.20 As we move forwards and look towards achieving both modal shift and decarbonisation targets, we will see a shift in the skills and labour required. There will be an increase in technology adoption which will present highly skilled and highly paid employment opportunities. As we face these opportunities and challenges, the sector needs to attract talent that can rise to them and grow with the industry they serve.

6.21 Such opportunities will also support the levelling up agenda. Logistics UK[121] note that The Midlands and North West are home to sizeable proportions of logistics employees, representing the regions' significance in the movement of goods throughout the country.

Key activities for a stronger Future of Freight

6.22 **Generation Logistics:** DfT are working in partnership with Logistics UK and the Chartered Institute of Logistics and Transport (CILT) to deliver an industry led programme of promotional activities which will:

- bring the freight and logistics industry together
- shift perceptions of the industry
- improve diversity of the sector
- encourage the next generation of logistics workers to engage with the opportunities available and keep the nation's supply chain protected

6.23 Generation Logistics will shine a light on the sector, bringing unprecedented visibility to companies and addressing their recruitment gaps. Activity will target the next generation of logistics workers, ensuring commercial longevity and the ongoing integrity of the supply chain, whilst aiming to improve diversity across the sector.

6.24 **Employer engagement:** To further raise awareness of the career options available in the freight and logistics sector, the sector will be a core component in Department for Education's (DfE) developing single employer engagement strategy that aims to ensure government is speaking to industry with one voice through cross-government/ industry forums. An early output of this work is the new 'Find training and employment schemes for your business' gov.uk platform. Government will work to improve industry links with DfE infrastructure (Careers & Enterprise Company and the National Careers Service) and encourage collaboration through industry-led campaigns to help learners understand their routes into careers in key sectors, including freight and logistics. Government will also continue to work with employer forums, such as the Aviation Industry Skills Board (AISB) to understand workforce challenges and inform initiatives.

6.25 **Qualifications and training offers:** DfT, supported by DWP and DfE will improve employer understanding of the benefits of government-funded skills intervention, encouraging employers to see themselves as 'partners' of skills offers by: i) supporting the development of offers (e.g. through apprenticeship Trailblazer groups); ii) investing in them to build their pipeline of talent; and iii) acting as skills champions at a local level, engaging with the employer representative bodies developing the new Local Skills Improvement Plans (LSIPs) and providers to shape local provision that meets employers needs.

6.26 **Review of training offers:** DfT, supported by DWP and DfE will undertake a review of training incentives available for freight and logistics business verses their business needs. This will be done through the Freight Council, with support from policy and employer engagement teams in DWP and DfE.

6.27 **Reform freight and logistics training offers:** Government will work with the industry to identify which transferable skills would allow candidates to take roles across the freight and logistics sector. Through skills reforms, the Government are creating routes to fulfilling careers for career starters and career changers from classroom-based training to in-work and work-based options. By the end of the decade the vast majority of our programmes will **align with employer-led standards.** We will build on the ambitions of the Skills for Jobs white paper by:

- Improving workforce readiness through investment in high-value, employer-led classroom-based learning (T Levels and Higher Technical Qualifications)
- Investing in occupational traineeships to provide a work-based route to employment/apprenticeships for young people at risk of long-term unemployment
- Investing in retraining opportunities for the existing workforce through short term, flexible in-work options Skills Bootcamps, and high-value classroom-based training (Free Courses for Jobs)

6.28 To support government focus on our future of freight commitments, departments are working together to understand and enhance cross-government Logistics, Transport, and Supply Chain Operations capability.

Building on the National Infrastructure Commission (NIC):

These actions directly build on the NIC's recommendations and expert advice to deliver a "new Status for freight" (see Annex B for further details). By using the freight council to deliver campaigns that will ensure the Freight and Logistics sector is seen as an industry of choice for potential employees.

Achieving our Future of Freight vision

The above key activities will deliver a sector that is:

Cost efficient, reliable & resilient	Securing the people and skills required will support the operational efficiency of the freight system bringing more certainty to the users of freight.
Environmentally sustainable	A Net Zero freight sector will require new skills to operate and maintain new equipment and technologies.
Valued by society	Generation Logistics will directly promote the sector building awareness and supporting careers choices within the industry.

We will succeed when:

- There is evidence of a change in perception of the sector –through the Generation Logistics campaign we want to increase awareness by 25%, and positive sentiment by 40% in the first 12 months
- Industry see a reduction in the time it takes to fill vacancies.
- Industry delivers an improvement in diversity in relation to age, gender, and ethnicity within the sector.
- Industry delivers improved facilities and working conditions for HGV drivers.

Through the
Generation Logistics campaign
we want to
increase awareness
by 25%

7

Priority 5 – Technology and data enabled opportunities

Government and industry will collaborate to:

- Create an innovation sub-group of the Freight Council to build awareness of the sector to innovators and innovative solutions available to the sector
- Co-design new dedicated £7m cross-modal Freight Innovation Fund
- Develop the future pipeline of solutions to meet the sector's real-world needs

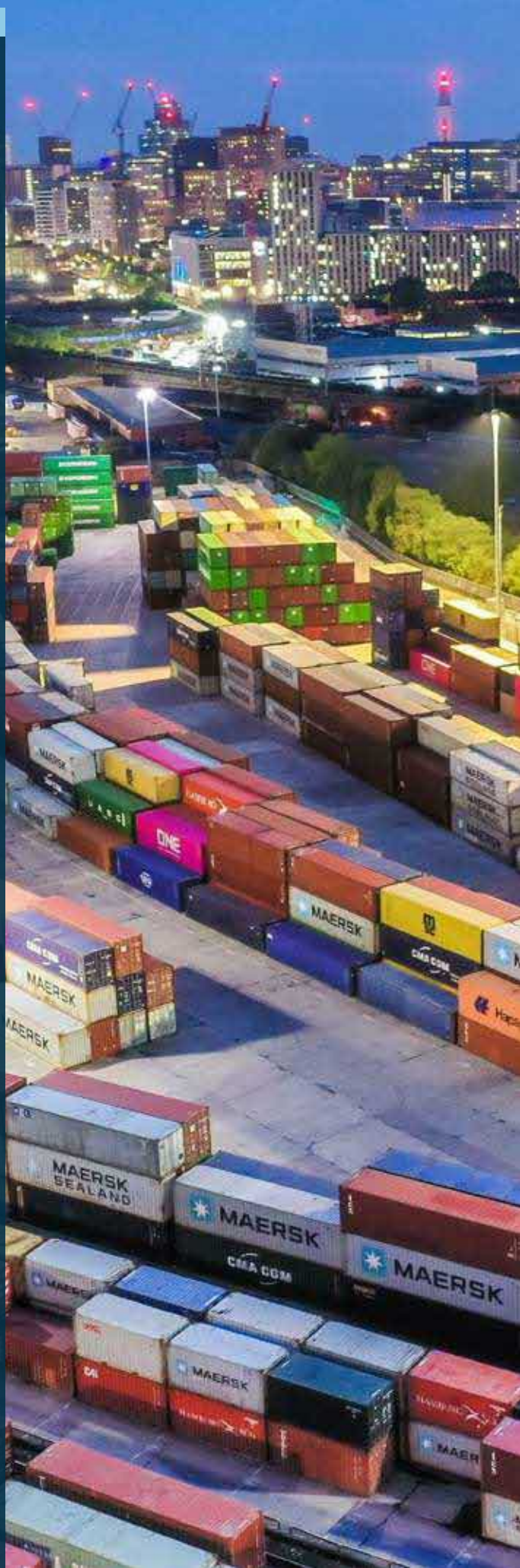
The challenge ahead

The challenge:

There is insufficient awareness among the sector of innovative solutions coming to market, alongside limited awareness of the sector's needs amongst innovators . There is also an incomplete understanding amongst industry and government of the ability of viable technologies to meet real-world freight problems .

7.1 The supply chains of the future are expected to be even more driven by technology and data, enabling them to be more efficient, reliable, resilient, and sustainable. Through our industry engagement and research, the application of new technologies and improved use of data have been highlighted as critical components to achieving these overarching objectives, for example:

7.2 **Efficiency:** Technology and better use of data is core to improving operational and fuel efficiency, for example, connected vehicles and data sharing[122] have the potential to support increased efficiency of freight and load consolidation, reducing congestion and harmful emissions[123]. Automated driving features could also improve fuel efficiency for a range of fleets, and innovative engine design as well as retrofit solutions continually improve fuel efficiency.



7.3 **Reliability:** The use of predictive, geospatial, blockchain and AI technologies could increase the reliability of supply chain forecasting, planning and operations, thereby increasing supply chain resilience and flexibility[124].

7.4 **Resilience:** Technology and data-driven innovations could have a larger role in building resilience by shielding the sector from digital disruption and allowing it to respond more effectively to physical disruption. This will also address workforce resilience issues by creating highly skilled employment opportunities and using automated and digital solutions to improve safety and working conditions across the sector.

7.5 **Environmental sustainability:** The optimal technology pathway to net zero is uncertain and further technological development is required. Continued joint investment is needed in research, development, and commercialisation strategies for a broad range of potential solutions at all levels of the technology readiness scale, including alternative fuels. See Chapter 4, Net Zero. Technology and innovative design has also been essential in progress towards minimising other environmental impacts such as noise and air quality.

7.6 Despite these technology and data enabled opportunities, there can be a reluctance to invest where business cases are unproven or operators are not confident in the best available solutions, due to:

- A disconnect between the tech developers and the real-world freight and logistics challenges these could be tailored to
- No comprehensive sharing of the cost-benefit outcomes and technology limitations identified through trials and tests across the sector. For example, the mutual benefits of data sharing across the supply chain and between private – public bodies are yet to be proven on a wide scale
- Lack of expertise, incentive, or resource within all parts of the sector to fully appraise solutions, especially amongst smaller operators. For example, conversations with the sector have shown there is limited expertise on how to utilise Connected and Automated Mobility (CAM), especially systems engineering
- A mismatch between the sector's longer-term investment planning cycles verses the government's relative short-term funding cycles, coupled with limited freight industry input into R&D programme design.

Strategic goal:

Build awareness of the sector amongst innovators and the sector's awareness of innovators, accelerate the adoption of readily available solutions within the sector and develop the future pipeline in line with the sector's real-world needs .

Where are we heading?

7.7 Government and the freight and logistics industry share a collective ambition for the sector to be able to readily harness the opportunities of viable technologies and data driven innovations to improve economic efficiency, reliability, resilience, and environmental sustainability. This will be achieved by:

- Building awareness of the sector amongst innovators.
- Expanding the sector's awareness of viable solutions, including their limitations.
- Accelerating the adoption of commercially available technology and data-driven innovation where it can make a real-world difference to address the sectors' core areas of challenge.
- Developing the future pipeline of solutions with the sectors' requirements in mind.

Strong foundations

7.8 The government's vision is to make the UK a global hub for innovation and has sought to accelerate innovation in multiple potentially game changing areas for freight logistics, through strategy, R&D, and innovation funding[125].

7.9 There has been a sustained programme of investment by government and the freight and logistics industry in finding and developing new solutions. The below summarises how key technology and data driven investments have been targeted over the last five years to help create a world beating freight and logistics sector. See Annex A for a more comprehensive 5-year investment overview:

- **Decarbonisation and emissions reductions:** As government continues to implement the Transport Decarbonisation Plan, innovation and technological advancement – including for alternative fuels –will be essential to the sector's transition to net zero. See Chapter 4 also.

- **Data sharing and exchange:** Digital technology and connectivity has a key role in increasing the efficiency of supply chains and digitising borders is core to easing freight flows, as set out in the 2025 UK Border strategy. There has been a shift in the uptake of digital technologies within freight and logistics, such as telematics driving efficiencies in road-haulage. Government and industry have begun exploring opportunities for data sharing for mutual benefit, including recent work undertaken by the Connected Places Catapult to explore avenues for combining freight data and utilising it in private and public decision making[126].

- **Connected and automated mobility:** Industry has made notable investment in automated solutions at distribution centres, ports, and intermodal exchanges. A key driver of which has been to improve safety, for example UPS invested to eliminate workplace transport risks and automated container terminals are increasingly commonplace, such as Port of Liverpool and London Gateway. Notable investments have also been made in automated last-mile delivery solutions, for example Ocado has invested £10m in both Oxbotica and Wayve, and Wilko invested £3m in Streetdrone to develop automated delivery units[127]. Since 2015, government has enabled the investment of over £400 million into the UK Connected and Automated Mobility (CAM) sector[128].

- **Connected/intelligent systems:** Recent simulation trials of connected traffic signals to prioritise HGVs at key junctions show real promise in reducing energy costs and harmful emissions[129].

- **New modes:** Technological developments are leading to the emergence of new forms of freight transport or modern takes on existing forms to ease congestion and air quality, such as underground freight distribution systems, new express rail-freight services and drone technology for cargo operations. The UK is a major player in aviation technology –the government wants to capture the benefits of new types of aircrafts such as drones, including for delivery services.

- **Regulation:** The government's aim is for the UK to be at the forefront of shaping the future of transport. A flexible and forward-looking regulatory framework for transport as a whole is critical to achieving this, and freight and logistics needs to be at the core of government's Future Transport work.

Case study – Transport Research and Innovation Grants for freight

The Department for Transport run an annual Transport Technology Research and Innovation Grant (TRIG) programme, aimed at supporting innovators by de-risking the development of new technologies and helping early-stage innovations reach a commercial solution.

Over £300k was awarded under TRIG in 2019 and 2020 for 11 early-stage R&D projects to decarbonise the freight system.

Building on the success of this, 2022 saw the addition of a specific £810k fund for the Future of Freight.

The 12 successful projects were announced in February 2022, and the innovators will receive support from DfT throughout the lifecycle of their innovation. A full list of the exciting concepts can be found below.

Building on the success of this, 2022 saw the addition of a specific £810k fund for the Future of Freight

Future of Freight £30K: 7 awards

Organisation	Description
University of Cambridge	Original steering design for HGVs that allows for both longer vehicles and lighter tires.
Brunel University London	Novel design for HGV trailer that is more drag resistant.
CurbCargo Limited	A freight delivery/collection booking platform for businesses, districts, and cities to encourage collaboration and thereby reduce pollution and congestion caused by urban freight movements.
Mole Solutions Ltd	Development of a Control Module for intermodal operations on an innovative Underground Freight Transport system.
Cyth Limited	A power harvesting device to enable an IIOT that can be used for predictive maintenance on unpowered rail cars.
Kale Collective	Software that allows urban freight operators to assess whether how they could convert their fleet to cargo bikes.
London South Bank University	Low carbon food transport refrigeration trucks with hydrogen fuel cell and metal hydride reactors

Future of Freight £100K: 6 awards

Organisation	Description
Voltempo Limited	Redeployable charging hubs for fleets of HGVs/ buses that can be installed overnight.
CGA Simulation	Tool for city planners to help estimate freight demand and ascertain where microconsolidation centres are needed. To be trialled by TfGM.
Hypermile (Trading Name); Creation Labs AI Limited (Legal Name)	Development of an in-HGV AI that provides real time feedback to drivers to improve fuel efficiency.
3Squared Ltd .	Web platform for short notice freight train wagon booking to maximise freight capacity.
Fishbone Solutions	Technology developed that uses vibrational data from rail tracks to perform predictive maintenance.
Anteam	Development of an “Airbnb of logistics” that allows people already making passenger car journeys to act as a delivery person for two businesses partaking in a trial.

What next?

7.10 Whilst there is a good track record of government and industry driving technology and data advancements in freight and logistics, more can be achieved through fostering a more collaborative relationship and raising the status of freight.

Key activities for achieving a stronger Future of Freight

7.11 The freight and logistics sector and government will:

Year 1–Build awareness of the sector's challenges that can be addressed through technology and digitalisation via an innovation sub-group of the Freight Council by June 2022, to:

- Better connect innovators and the sector, and to explore the case for a dedicated innovation exchange service for freight and logistics.
- Ensure the freight and logistics sector is aware of the support available across government.
- Share technology developments in the freight and logistics sector, including results of trials and tests by government and Freight Council members –and explore a dedicated knowledge exchange portal.

Years 1–3 –Accelerate adoption of commercially ready solutions into the sector by:

- Co-designing a new dedicated £7m cross-modal **Freight Innovation Fund**, for later stage, commercially available technology to prove / disprove the business cases for their deployment.
- Government recently announced that it is making £7.6 million available for cutting-edge technology that will help transform rail travel. The year's rail **First of a Kind** competition is focusing on technologies that improve the industry's cost efficiency and network performance to support a more reliable railway for passengers and improving rail freight.

Years 3–5 –Develop the future pipeline of solutions to meet the sector's real-world needs by:

- Undertaking research into where to best target future government support for innovation within freight and logistics.
- Continue to invest in early-stage technology trials in the freight and logistics sector through the Transport Research and Innovation Grant (TRIG) programme.
- Test with industry agreed 'proofs of concept' for improving data exchange to identify data sources that will help to create many of the digital and connected services in the future for freight and logistics.

- Work to ensure the development of *2025 UK Border Strategy* (2020) projects such as the Single Trade Window (STW), Advanced Risk Analytics (ARA) and Ecosystem of Trust (EoT) are integrated with any platforms and systems developed through the implementation of the Future of Freight plan and the Freight council sharing data where possible and where this will improve efficiencies and add value for customers using these systems.

Building on the National Infrastructure Commission (NIC):

These actions directly build on the NIC's recommendations and expert advice to deliver "new and better data" (see Annex B) . The above actions will support testing greater data exchange within industry and with government . More broadly the ambition to boost innovation takes the sector further on NIC recommendations on decarbonisation and optimisation .

Achieving our Future of Freight vision

The above key activities will deliver a sector that is:

Cost efficient, reliable & resilient	by optimising the sector's use of technologies.
Environmentally sustainable	by increasing the uptake of technology and innovations that are proven to reduce emissions and environmental impacts.
Valued by society	by being seen as technology advanced and creating highly skilled employment opportunities.

We will succeed when:

7.13 Government and industry will know that progress is being made against this priority when we achieve the following desired outcomes: These are long-term outcomes, that may take longer than the next 5 years to show material benefits.

- Industry engagement sees an increase in the uptake of innovative technologies and digitalisation.
- Government and Industry have access to more coordinated, consolidated and richer data on the freight and logistics network and sector.
- Reduced emissions from the freight and logistics sector on the path to net zero (as outlined in chapter 4).
- Improved safety –a reduction in the number of injuries and deaths related to freight and logistics for employees and members of the public. Measured against baselines, such as:
  - o Rate of 0.85 fatal injuries per 100,000 workers[130]
  - o Estimated rate of 2,110 non-fatal injuries per 100,000 workers[131]
  - o Road safety: 250 reported accidents (all severities) involving heavy goods vehicles per billion vehicle miles[132]

8

Priority 6 – Moving to implementation

8.1 In this plan, government and industry have set out a forward thinking and ambitious programme for supporting the next generation of Freight and Logistics in the UK. By focusing on our initial set of priority areas, we will deliver a Freight and Logistics Sector that is cost efficient, resilient, reliable, environmentally sustainable, and valued by society.

8.2 The plan represents a key milestone in this ongoing partnership between industry and government, and central to maximising impact will be taking its content and building on this iteratively with industry. We must build on the momentum of the past years and the publication of this strategy to rapidly move to implementation. The plan outlines the key actions we must take forward (see below), however we must work with industry to constantly test, iterate and develop these actions taking a dynamic and organic approach to implementation.

National Freight Network	Enabling the transition to Net Zero	Planning
• Identify a National Freight Network • Undertake valuation of Freight studies • Visibility of Freight in Infrastructure Planning • Support Modal Shift	• Create a Freight Energy Forum • Support and promote mode shift • Undertake a regulatory review of barriers to delivery of zero carbon energy infrastructure • Maximise the potential of modal initiatives by demonstrating a zero carbon cross-modal freight journey • Continue delivering the commitments outlined in the Transport Decarbonisation Plan.	• Work with the sector to support a programme of engagement with local planning authorities • Review and amend Planning Practice Guidance • Publish a freight specific call for evidence to understand what is working well and not so well • Consult on updated guidance for Local Transport Plans • Engage with the review of National Networks National Policy Statement • Engage with the Planning Reform programme

People and Skills`	Technology and Data
• Deliver Generation Logistics campaign in 2022. • Ensure the Transport Employment and Skills Taskforce meets our future skills needs in freight and logistics. • Support a programme of employer engagement • Reform Freight and Logistics training offers to encourage transferable qualifications. • Support efforts to boost diversity within the sector.	• Innovation sub-group of the Freight Council to build awareness of the sector to innovators and innovative solutions available to the sector • Co-design new dedicated £7m cross-modal Freight Innovation Fund • Develop the future pipeline of solutions to meet the sector's real-world needs

Our partnership so far

8.3 All of these actions require strong and ongoing collaboration and co-delivery with industry and will build on our approach to engagement to date. To co-develop this strategic plan, the Department for Transport (DfT) has worked closely with industry and across government. We used existing fora, and bespoke Future of Freight events to engage over 350 stakeholders, across a series of Freight Council meetings, scoping workshops, focused roundtables, and in-depth one to one discussions.

8.4 This has helped us to develop a strategic plan that rightly focuses on the priority challenges and opportunities that the freight sector is facing.

8.5 This signals the start of new era of partnership working between government and the freight and logistics sector, using the Freight Council to continue to guide our approach and raise the status of freight.

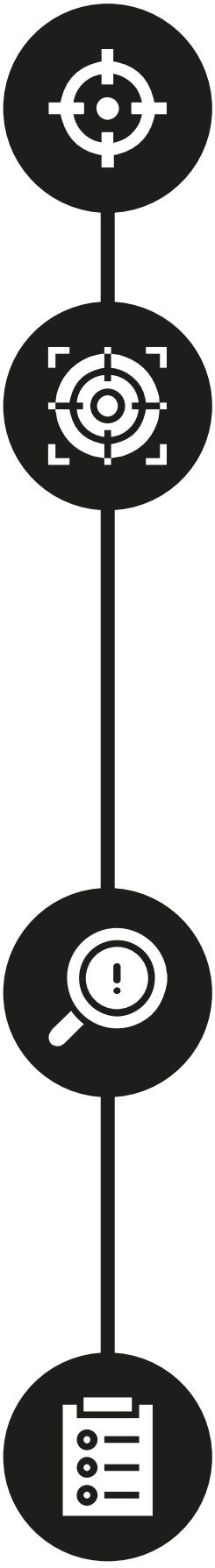
Our engagement objectives:

1.
To raise stakeholder awareness of our overall approach to the Future of Freight and the government's renewed, strong focus on freight .

2 .
To access expert insight from across the sector on the long-term strategic issues and opportunities and together identify actions to address these .

3 .
To establish the means for an enduring elevated status for freight in government-industry engagements and forums .

Our engagement approach:



Initial scoping

Government sought views from our Freight Council members on the core priority challenges and opportunities facing the sector and undertook desk-based research into the emerging trends for freight i.e. key changing factors.

Detailed scoping and prioritisation

The long-list of factors highlighted by the Freight Council and our research were further refined through a series of industry workshops, attended by 180 stakeholders, centred on the themes of:

1 . Freight's role in economic growth and levelling up

2 . Global britain and freight

3 . Reducing freight's environmental impact

4 . Transport for the freight user

These government policy themes were used as 4 different and contrasting angles by which to gain a collective understanding of where the freight industry is now, where the industry wants to be in the long term, and the key opportunities / obstacles to getting there.

Problem identification

The outputs of these workshops were analysed against the current policy landscape, to identify 5 core priority gaps where there was deemed further potential for government and industry to work together to remove barriers to the sector reaching its potential.

Focused roundtable events on the following topics were attended by 118 stakeholders, to start to better understand the issues, identify evidence, gaps or weaknesses in current policy and define an agreed target position:

1 . Skills & people, making freight an industry of choice .

2 . impact of the planning system on the freight and logistics sector .

3 . Overcoming the uncertainty of the future energy mix and infrastructure for a net-zero freight sector .

4 . Optimising freight infrastructure .

5 . Innovation and technology (a ministerial chaired roundtable hosted by CAM test bed UK in the West Midlands) .

Planning

Roundtable write-ups were shared for comment with attendees that documented a vision, the strengths, weaknesses opportunities and threats of the current situation, a problem statement, and proposed early thinking of actions that could be taken to address.

This was further refined with Freight Council members and cross-Whitehall representatives, to develop the basis of Future of Freight.

Pivoting to implementation

8.6 Our engagement and the structure of the Freight Council have been core to getting the Future of Freight programme to this point, with a strong plan for the future and a powerful relationship between government and industry to take it forward.

8.7 Looking ahead, we will need to take this relationship and engagement approach and reorient it from the strategic and scoping phase towards an implementation and delivery mindset. As such, after publication of this plan we will be working with existing Freight Council members to reconsider the structures of the Freight Council. This will involve appointing an industry co-chair to drive the group alongside the sponsoring DfT Minister and working with members to implement a new structure with sub-working groups focussed on delivering the key priority areas of the plan. In composing sub-groups, consideration will be given to inclusion of freight operators, end users, manufacturers, regulators and those with academic or professional services specialisms and across those categories large and small operators, and a mix of operators and stakeholders with national and regional operations.

8.8 Upcoming Freight Council meetings will be key moments for delivering this reorganisation and assessing progress and driving towards delivery on the key actions of this plan. Looking ahead we hope to:

- Summer 2022 Meeting –Introduce newly appointed industry co-chair and undertake a post-publication stocktake review of the reception to the plan and next steps
- Autumn 2022 Meeting –Embed new Freight Council structures and finalise implementation phase programme plans for each priority area.
- Winter 22–23 Meeting –Portfolio review of programme progress and first quarter sub-group stocktake.
- Spring 2023 –Horizon scan, stocktake and lessons learned from first 12 months, feeding into delivery plans for 2nd year and beyond.

The Future of Freight

8.9 This plan marks a key achievement in government and industry delivering a stronger freight and logistics sector for the benefit of the whole country. The plan marks a considerable effort to develop a route-map for the future. Through this plan we have co-developed clear long-term objectives, a strong sense of medium-term priorities, and key actions for the next five years and beyond to begin to deliver against all of these.

8.91 Our core task going forward will be making sure this plan marks the start of developing that route map rather than the ending, building on strong collaboration to take a flexible and iterative approach to getting the best deal for the sector. Government and industry leveraging their strengths and power can have a huge impact delivering the future of freight the country needs to underpin levelling up, economic growth and a truly global Britain for generations to come.

Annex A – The UK freight sector today

National Freight Network

Current policy landscape

Cross modal

Freight Corridors: Government and industry collaboration over recent years through Network Rail and National Highways Solent to Midland Freight Strategy to take an increasingly multimodal approach to understand the UK's National Freight Network.

Port Connectivity Studies: Department for Transport led research to improve understanding of freight flows from UK ports to road and rail, highlighting areas of improvement for connectivity.

Warehousing investment: Government is working with industry to explore ways to protect and expand the warehousing land capacity, aiding the completion of 40 million sq. ft. in 2021, up from 20 million the previous year.

Rail Freight Interchanges: The Planning Act 2008 includes strategic rail freight interchanges within the scope of Nationally Significant Infrastructure Projects (NSIP) enabling schemes meeting the threshold to be considered directly by the Planning Inspectorate rather than by local planning authorities.

Union Connectivity Review: Has reported and recommended the establishment of a strategic, multi-modal transport network for the UK (UKNET). Work on the NFN will have to build on and integrate work to take forward the UCR.

Freeports: Establishment of 10 ports from late 2021 where different economic regulations apply aimed at increasing trade and regenerating local areas.

Freight Data Repository: Prototype repository developed by Transport for the North to inform strategic freight planning.

Road freight

Local roads: Local roads are managed, maintained, and enhanced by local highway authorities and combined authorities, Local roads are funded through a combination of locally generated taxes and rates, and through grant allocations to local highway authorities for specific enhancements and interventions.

Road Investment Strategy (RIS): £17bn invested between 2015–2020 on essential upgrades, maintenance, and operation on the strategic road network –the roads that see two-thirds of all HGV miles. 2020–2025 sees a planned £24bn of spending covering a wide range of projects across the whole of England, with the following five-year investment cycle's Initial Report to be published in summer 2022.

Rail freight

Track Infrastructure Investment: £10.5bn to be spent between 2019–2024 for enhancements on the network for both passengers and freight. Government invested over £235m between 2014–2019 on strategic freight routes to improve the capacity and capability of the network for freight users. A recent example of rail freight enhancements completed are £8.3m Port of Liverpool access ; which has allowed for an increase from one, to two trains, per hour in each direction.

Williams-Shapps Plan for Rail **(2021):** The Plan for Rail reaffirmed government's ambition to introduce a rail freight growth target to strengthen rail freight on the national network and create new opportunities for growth and investment.

Integrated Rail Plan: The Integrated Rail Plan (IPR) will help to free up capacity on the existing network, and deliver improved capacity and capability for rail freight across the Midlands and North. The IRP confirmed a further £625m in funding for the Transpennine Route Upgrade (TRU), seeing it upgarded and electrified.

Maritime freight

IMO & Multilateral Negotiations for Shipping: The UK is an influential voice at negotiations on maritime transport in the major international maritime bodies, for example where the UK played a leading role in the agreement of the International Maritime Organization's 2018 Initial Strategy on Reduction of Greenhouse Gas Emissions from Ships.

Port investments: Whilst ports investment is mostly industry led, government committed substantial funding to help prepare the sector for new customs arrangements following Brexit, including the Port Infrastructure Fund.

Aviation freight

Night flights: A government consultation in July 2021 on night flight policy is attempting to strike a fair balance between the negative impacts of aviation, in particular noise, and their positive economic benefits. Existing night flying regulations will remain at Heathrow, Gatwick, and Stansted until 2025 to allow for the impacts of the pandemic to be understood. Operational ban on QC4 rated aircraft movements during the night quota period from October 2022, with a further consultation in 2023 for post 2025 restrictions.

Flightpath to the Future: a framework for aviation: The government has published a medium-term strategic framework for the sector, which focuses on building back better and ensuring a successful UK aviation sector for the future. This framework explores key sector issues, including consideration of workforce and skills, regional connectivity, noise, innovation and regulation, and consumer issues. Government also considered climate change and decarbonisation, as well as the critical role that aviation plays in maintaining the UK's global impact.

Transition to Net Zero

Current policy landscape

Cross modal

Low carbon fuel policy: Renewable fuels, including biofuels such as bioethanol, biodiesel and biomethane, are supported in the UK under the Renewable Transport Fuel Obligation (RTFO) scheme, a certificate trading scheme, which has been in place since 2008. Commitments to maximise the benefits of low carbon fuels set out in the TDP included the development of a longer term strategy for the deployment of low carbon fuels between now and 2050 alongside the development of a mandate for Sustainable Aviation Fuels (see below).

UK Hydrogen Strategy: A key report that, alongside the TDP, makes clear that hydrogen will play a significant role in decarbonising freight. £3m invested in 2021/2 to support the early development of the Tees Valley Hydrogen Transport Hub, delivered pilot projects to seed hydrogen demand in the area and catalyse collaborations between industry, academia, and the local authorities.

Modal shift: Government continues to provide £20m funding for this shift from road to rail, inland waterways, coastal and short sea shipping through the Mode Shift Revenue Support Scheme and Waterborne Freight Grant Schemes. These grants help remove around 900,000 HGV journeys off the road and remove 58,000 tonnes of CO2 emissions each year.

Last Mile Logistics: Government are committed to transforming the last mile into an efficient and sustainable delivery system, through supporting new vehicles such as e-cargo bikes or improvements to the logistics system. Having already funded local authorities and businesses with £3.5m to support access to e-cargo bikes, the Zero Emission Transport City (below) will include up to £2m for an ambitious e-cargo bike pilot.

Pathfinder projects: Government are reviewing the Traffic Regulation Order (TRO) legislative framework and will consult in due course on improvements that could deliver near-term carbon savings by reducing the number of vehicle movements through the use of new technologies and smarter regulation, such as dynamic kerbspace and delivery management. Dynamic kerbspace could increase the efficiency of last mile deliveries through easing restrictions that limit services that are reliant on the loading and unloading of goods.

Zero Emission Transport City: Government has committed to create at least one Zero Emission Transport City, which will explore deliveries made to consolidation hubs with the last mile being done by cargo bike or electric van. Research into the legal and practical issues around compulsory consolidation centres has also been commissioned by government, setting the groundwork for potential future pilots.

Cross modal

48 for 48: Trial allowing heavier road freight to travel short journeys to or from rail interchanges.

Other environmental policy (not in relation to net zero):

UK air quality standards and Clean Air Zones: The Air Quality Standards Regulations 2010 seek to control human exposure to pollutants in outdoor air to protect human health and the environment by requiring concentrations to be within specified limit values. In addition, some local authorities have introduced clean air zones, some of which set a minimum emission standard for HGVs and vans below which a charge is levied..

Climate Change Adaptation: The Climate Change Act 2008 allows the Government to ask certain organisations, including key transport operators, to produce reports on the current and future predicted effects of climate change on their organisation and their proposals for adapting to climate change. The Climate Change Act also sets the requirement for a Programme for adaptation to climate change. This is the 5 yearly reporting cycle called the National Adaptation Programme. The third National Adaptation Programme is due in 2023.

Noise: Management of noise by freight and logistics operators is a key consideration in the planning regime (see the planning section). In addition, Environmental Noise (England) Regulations 2006 (as amended) require regular environmental noise mapping and action planning for road, rail and aviation noise, and noise in large urban areas (agglomerations). Noise Action Plans identify Important Areas (areas exposed to the highest levels of noise) and ways the relevant authorities can reduce these. Major airports and those which affect agglomerations are also required to produce and publish their own Noise Action Plans.

Road freight

Non-zero emission HGV phase out dates: Government has announced the phase out dates for the sale of new non-zero emission HGVs. This will end the sale of new non-zero emission HGVs 26 tonnes and under by 2035. All new road vehicles sold in the UK must be zero emission by 2040. The full consultation response has been published, alongside a call for evidence on potential exemptions to the 2035 phase out date for HGVs 26 tonnes and under[133].

Zero Emission Road Freight demonstrations: £20m invested in 2021–2022 to support industry-led feasibility studies into developing cost-effective, zero-emission HGVs and their associated infrastructure. Government will be building on the success of this work by expanding the programme to demonstrate three zero emission HGV technologies at scale on UK roads. Battery electric and hydrogen fuel cell competitions will be launched shortly. New battery electric HGVs in lighter weight categories (19 tonnes), built by Leyland DAF, are already running on UK roads, delivering supplies for the NHS and others.

Electricity Networks Strategy: In partnership with Ofgem, the independent energy regulator, government is working to deliver a Strategic Framework for the electricity network. This will outline potential energy demand scenarios created by increasing electrification, including the transition to electric cars, vans and HGVs.

Double Length Semi-Trailers and Longer Semi Trailers: A variety of policy measures are being explored to support larger HGV payloads, which can increase the efficiency of freight movements, such as the use of heavier HGVs for intermodal freight, the ongoing trial of Longer Semi Trailers, and the use of longer and heavier HGVs.

OZEV LGV and HGV Grants Plug in vehicle grants: A fund currently available until 2025 for sellers of zero emission HGVs/LGVs.

Zero Emissions Automated Logistics: Government will work with the logistics sector to enable the safe deployment of zero emission automated delivery and goods vehicles on UK roads and on private land, for example ports, factories and distribution centres.

Project Rapid: Research to assess and deliver charging needs for electric and light vans.

Road freight emissions reductions: Government has updated and relaunched the Energy Saving Trust's (EST) Freight Portal, to provide more and better information, particularly focused towards smaller freight operators. We will continue to support the EST to build upon this work and expand, improve and promote the portal to road freight operators.

Rail freight

Rail electrification: Electric locomotives are deployed for freight, facilitated by the electrification of almost 800 miles of the network in England and Wales. The Traction Decarbonisation Network Strategy (TDNS) will inform decisions about the scale and pace of decarbonisation between now and 2050; it focuses on electrification and other traction technologies.

Rail investment: To enable further modal shift from road to rail, the Government will invest in the capacity and capability of the rail network for freight through the Rail Network Enhancements Pipeline (RNEP), including on projects like the recently completed upgrade to the key freight corridor between Southampton and the Midlands. HS2 will release a significant amount of spare capacity on the southern part of the West Coast Main Line, some of which could create opportunities for freight operators to grow and develop.

Connected Places Catapult R&D: In 2021–22, government funded a Connected Places Catapult (CPC)-led R&D project, that will identify low-emission technologies for use in the rail freight estate and stimulate innovation in this sector.

First of a Kind competitions: Over £4m of funding provided since 2019 through Innovate UK-run First of a Kind competitions for new traction technologies that reduce rail emissions.

Air quality monitors: To improve air quality, Government is funding the roll out of air quality monitors at more than 100 railway stations across England and Wales. The network will initially provide a snapshot of air quality on the railway and identify priority locations where improvement measures are needed. Once established it will show how air pollution levels change over time, helping us to understand the effectivenesss of different interventions.

Maritime freight

The Energy Efficiency Design Index (EEDI) was introduced in 2013 to progressively improve the design and operational efficiency of ships and their propulsion systems. A further package of measures on carbon intensity and energy efficiency for existing ships is due to enter into force in 2023[134].

Clean Maritime Demonstration Competition: £23m fund launched in March 2021 by DfT. This one-year 'springboard programme' will lay the foundations for a network of real-world projects, gearing up maritime decarbonisation in the UK. As set out in *Net Zero Strategy* (2021), government will be extending this to a multi-year programme, delivering real-world demonstrations and technology trials of clean maritime vessels and infrastructure to decarbonise the maritime sector.

The ClydeBank Declaration: Signed at COP26 alongside other leading climate nations, making clear our support for the adoption at the IMO of an ambitious target of zero emissions from international shipping by 2050. Under the Clydebank Declaration, 22 states from around the world committed to supporting the development of green shipping corridors.

Operation Zero: Operation Zero brought together a coalition of industry partners, convened by DfT, to accelerate the decarbonisation of the operations and maintenance vessels working in the North Sea's offshore wind farms. Government also launched a call for evidence in February 2022 on different aspects of supporting the deployment of shore power and the provision of shoreside electrical power to a docked vessel while its engines are shut down.

UK SHORE: In early 2022 it was announced that a £206m R&D programme will be delivered through the new UK Shipping Office for Reducing Emissions (UK SHORE). This formed part of government's refreshed National Shipbuilding Strategy.

Aviation freight

Jet Zero Consultation: Published in July 2021, the Consultation outlines government vision for aviation sector reaching net zero by 2050. The consultation focuses on the rapid development of technologies in a way that maintains the benefits of aviation whilst maximising the opportunities that decarbonisation can bring to the UK, with the full strategy to be published later this year.

Jet Zero Council: A partnership between industry and government announced in July 2020 that brings together leaders in aviation, aerospace, and academia to drive delivery of new technologies that can cut aviation emissions –aiming to deliver zero emission transatlantic flight within a generation.

Sustainable Aviation Fuels blending mandate: In July 2021, the government also consulted on the introduction of a UK SAF blending mandate, which government are aiming to confirm following a second consultation in 2022. The government's *Net Zero Strategy* (2021) confirmed our commitment to Jet Zero and sets out the government's ambition to enable the delivery of 10% SAF in the UK fuel mix by 2030 and included a funding commitment of £180 million to support the development of SAF plants in the UK. This builds on the progress made in previous advanced fuels competitions, including the Green Fuels, Green Skies competition. In addition, £15m of funding was awarded to eight companies at the end of 2021.

Aerospace Technology Institute (ATI) Programme: The government is also supporting the development of new and zero-carbon emission aircraft technology through the Aerospace Technology Institute (ATI) Programme –a joint commitment from industry and government to invest £3.9bn in aerospace R&D from 2013 to 2026. The recent Spending Review has extended our commitment to co-invest in aerospace by guaranteeing R&D funding for the ATI Programme to 2031.

International negotiations: The government is clear that international action on aviation emissions is essential given the sectors' global nature. The UK is therefore negotiating for International Civil Aviation Organisation (ICAO) to agree long-term emissions reduction goals for international aviation at the 2022 conference. At COP26, the UK launched the International Aviation Climate Ambition Declaration which has been committed to by a broad coalition of states to show support for ICAO adopting a 1.5°C-consistent long-term goal at the 41st Assembly. The UK is also committed to implementing ICAO's Carbon Offsetting and Reduction Scheme for International Aviation.

R&D Grants: Government sponsored research in 2021/22 on preparing airports and airfields for the advent of electric and hydrogen aircraft through the Zero Emission Flight Infrastructure Project.

Interim measures: Until hydrogen, electric and Sustainable Aviation Fuel options are fully deployable, carbon offsetting and improving efficiency of the fleet (through better use of data and operator controls/ design) are the primary aviation emission reduction strategies.

People and Skills

Current policy landscape

Cross modal

Logistics skills training: A guide for accessing logistics skills training jointly prepared by Logistics UK, with DfE, and DWP.

Logistics champions: Government established network across all DWP Jobcentres, to channel information and encourage active engagement with the sector at a local level. DWP is also exploring progression pathways into the broader freight and logistics sector, so there is support for people entering employment to train and progress. This work considers the specific labour needs of the industry, for example, working with the Warehousing sector to upskilling existing staff to become forklift truck drivers.

Skills for Jobs: DfE continue to reform our further education system, building on the vision set out in our Skills for Jobs White Paper (January 2021).

DWP's National Employer Partnership Team (NEPT) Engages with large national employers and trade associations, including the freight and logistics sector, to understand their needs and help them access DWP or other government offers. DWP also a bespoke employer engagement strategy with SMEs –which make up 85% of HGV operators –to support their specific recruitment needs.

Road freight

HGV driver facilities: Government has allocated £32.5 million for investment in roadside facilities for HGV drivers, such as showers, toilets and eating areas.

DfT has also worked with the Health and Safety Executive to **strengthen guidance to businesses**, including distribution centres, to make it clear that HGV drivers must be given access to sanitary facilities when visiting premises to make deliveries or take collections.

Industry led campaigns: DWP has partnered with trade associations to deliver campaigns such as the Road Haulage Association's 'Love the Lorry' campaign and Logistics UK's 'Discover Logistics Careers' 2021 campaign.

Partnership with major employers and trade associations to deliver **#JobsThatMove**, an internal communications and awareness campaign promoting HGV driving roles to work coaches.

DWP has been working closely with DfE and the National Career Service (NCS) on the rollout of **HGV Driver Skills Bootcamps** to ensure that jobseekers can access the training they need.

Road freight

Implementation of a **Job Centre Plus (JCP) HGV Driver Training Pilot** to fund HGV licence acquisition for 100 jobseekers as part of the wider Road to Logistics project.

Provision of Flexible Support Fund (FSF): funding to help claimants take on roles in the sector, such as funding the renewal of a Certificate of Professional Competence licence.

A range of DWP-funded **Sector-based Work Academy Programmes (SWAPs)** for HGV drivers are available in England and Scotland. Wales has its own separate arrangements.

DfE are working with Logistics UK and other key partners in the sector to develop an **Occupational Traineeships** for HGV driving.

Skills interventions: a significant package introduced by DfE which are intended to train up to 16,000 new HGV drivers in response to the acute driver shortage, including:

- £34m investment to train up to 11,000 new HGV drivers on **Skills Bootcamps**
- Widening access to relevant apprenticeships and taught courses funded through the Adult Education Budget in academic year 21/22 to deliver up to 1,000 places (there are five Level 2 certificates available in driving goods vehicles).
- Industry estimates point to the potential for 4,000 apprenticeship starts per year –in August government increased the provider funding band for the Large Goods Vehicle Driver apprenticeship from £5,000 to £7,000; and Institute for Apprenticeships and Technical Education (IATE) have worked with employers to introduce the new Urban Driver standard, which went live in December 2021.

Aviation freight

In February 2021 the Department for Transport launched the **Aviation Skills Retention Platform (ASRP)** which allows former and current aviation sector workers who are currently out of work to register their skills.

In November 2021, the DfT launched the early-careers aspect of the ASRP, **Talentview Aviation**. This platform connects aviation students to employers.

In January 2022, DfT recruited a set of 12 new **Aviation Ambassadors**.

Data and Technology

Current policy landscape

Cross modal

Future Fuels for Flight and Freight Competition: £22m of funding allocated in 2017 to projects that produce low carbon waste-based fuels to be used in aeroplanes and lorries.

Future Transport Strategy and Traffic Technology Forum: Programme and strategy launched in March 2019, including a new Technology Traffic Forum.

Civil Aviation Authority's Innovation Hub: Established in April 2019 to help bring new services to the market and allow trials in a safe environment.

CPC Drones Pathfinder Catalyst Programme: Provided £1.2m Programme (concluding in March 2022) to support integrating drones into UK airspace.

Future of Mobility Urban Strategy: Set out how government will drive policy that secures the benefits of Connected and Automated Mobility, guarding against unwanted outcomes. Launched April 2019.

Controlled Urban Test Site: Opened in Millbrook as part of today's CAM TestbBed UK, including facilities to test freight and logistics solutions.

3 new 'Future Transport Zones': £90 million funding boost beginning in March 2020 for real-world testing of new transport innovation for people and goods in 3 new Future Transport Zones –including multiple freight / logistics pilots.

2025 UK Border Strategy: Lunched in December 2020, the document provides a six-point strategy for implementing changes to the UK borders via better usage of data to minimise the wait time and streamline data. It also includes a range of measures to modernise and streamline checks at the border, including Single Trader Window, Advanced Risk Analytics, and Ecosystem of Trust.

Tees Valley Hydrogen Hub: The UK's first ever hydrogen transport hub kick-started by £3 million government investment beginning March 2021. It will function as a living lab to understand hydrogen's role in decarbonising the transport system, including freight.

Kick off of End-to-end logistics & data project: Commissioned in April 2021 by Connected Places Catapult to investigate sharing of high-quality freight data for mutual private and public benefit.

Future of Transport Regulatory Review: Consultation taking place from September to November 2021 seeking to identify areas of transport regulation that are a barrier to innovation and new technologies.

Cross modal

Aerospace Technology Institute Programme: £3.9bn programme which supports aerospace design.

TRIG Future of Freight: £810k of freight specific innovation funding as part of DfT's 2021 annual TRIG programme.

Spending review: DfT received £300m in R&D funding for transport decarbonisation programmes, plus £117m from innovate UK. Details of these schemes can be found below.

Road freight

Platooning: In 2017, £8.1m funding was made available for Helm UK, a project to progress real-world trials of HGV platooning.

Local Transport Data Discovery Report: 2018 report highlighted that roads-related transport data in England needs to be easier to discover, leading to DfT's Find Transport Data scheme.

Traffic signal prioritisation: Successful early-stage tests throughout 2019 and 2020, demonstrating potential for this to be used to manage freight flows and reduce emissions.

Connected Vehicle Data Research project report: This 2020 report identified much untapped data that can be exploited to reduce congestion and better provide information to road-users.

Zero Emission Road Freight Demonstrator programme: Government committed £20m in 2021/22 to support zero emission road freight trial feasibility, to pave the way for future trials. The Zero Emission Road Freight Demonstrator programme which will expand on the feasibility work undertaken last year will see at-scale demonstrations of three zero emission HGV technologies on UK roads, operating in real-world commercial settings. These demonstrators will provide a wealth of information that will be used to determine the operational benefits of each technology, as well as their infrastructure needs.

Rail freight

First Of A Kind Rail R&D Projects: Nearly £2 million in funding for five decarbonisation focused rail-freight projects as part of the 5th First Of A Kind innovation competition in 2021. Since 2019, government have provided >£4m First of a Kind competition funding for new traction technologies in rail.

Connected Places Catapult Low Emission Technologies: A Connected Places Catapult-led R&D project to identify low-emission technologies for use in the rail freight estate.

Rail Safety and Standards Board: Review into incentivising a transition to lower carbon forms of traction, capital and major refurbishment works.

Maritime freight

Government supported CAM Testbed UK site opens: £3.4m joint government-industry investment in a smart logistics testbed for 5G enabled logistics management and security in Millbrook as part of today's CAM Testbed UK in September 2019, with a similar £3.4m being spent at West of England Combined Authority and Port of Bristol in January 2021.

Clean Maritime Fund: Launched March 2021, £23m match-funded for UK innovators to support design and development of zero emission vessel technologies and greener ports.

UK SHORE: In early 2022 it was announced that a £206m R&D programme will be delivered through the new UK Shipping Office for Reducing Emissions (UK SHORE). This formed part of government's refreshed National Shipbuilding Strategy.

Aviation freight

Future of Flight challenge: £300m of joint industry and government funding announced in September 2019. Now in its third phase which will run until 2024, to explore Advanced Air Mobility.

Annex B – National Infrastructure Commission (NIC) Recommendations Update

NIC '*Better Delivery – The Challenge for Freight*' (2019) Recommendations (summarised)	Government Response (Aug 2021)	Update
1. **Decarbonising Road Freight:** Government should commit to decarbonising road freight by 2050, announcing plans by the end of 2021 to ban the sale of new diesel-powered HGVs no later than 2040. To support this Government should prepare detailed assessments of the infrastructure required to enable the uptake of battery electric or hydrogen HGVs and work with Ofgem, as part of the next energy distribution price review (RIIO ED2) starting in 2023, to include clear requirement for distribution network operators (in partnership with the freight industry) to map out the infrastructure upgrades and opportunities.	**Mostly endorse**	In Nov 2021 government announced all new heavy goods vehicles in the UK will be zero-emission by 2040. Future of Freight further commits to: • Freight Energy Forum, to identify cross-modal energy/ fuel infrastructure priorities • Regulatory Review of barriers to implementing new energy infrastructure for freight –to inform ofgem energy distribution price review in 2023. • Expanding our understanding of the domestic freight network, including exploring identifying a National Freight Network, to be used to support understanding of future energy infrastructure needs.
2. **Decarbonising Rail Freight:** Government should undertake detailed crossmodal analysis, using a corridor-based approach, of the long-term options for rail freight's transition to zero emissions, including low carbon rail services and the scope for road-based alternatives. It should then publish, by the end of 2021, a full strategy for rail freight to reach zero emissions by 2050, specifying the investments and/ or subsidies that it will provide to get there.	**Mostly endorse**	Future of Freight commits to: • Freight Energy Forum, to identify cross-modal energy/ fuel infrastructure priorities • Expanding our understanding of the domestic freight network, including exploring identifying a National Freight Network, to be used to support routes to decarbonisation and future rail decarbonisation needs.

3. **Managing Congestion:** To help manage peak time congestion on the urban transport network, local authorities should include a plan for urban freight within the infrastructure strategies they are developing. These plans should review local regulations to incentivise low congestion operations, consider the case for investments in infrastructure such as consolidation centres, and identify the land and regulatory requirements of new and innovative low congestion initiatives.	**Mostly endorse**	Future of Freight commits to: • Consultation and update of Local Transport Planning guidance by end 2022. • National policy position for consolidation centres based on research. • Updates to National Design Guide, Manual for Streets and National Model Design Code
4. **Better Planning to Enable Optimisation:** Government should produce new planning practice guidance on freight for strategic policy making authorities. The guidance should better support these authorities in planning for efficient freight networks to service homes and businesses as part of their plan making processes. This new planning practice guidance, which should be prepared by the end of 2020, should give further detail on appropriate considerations when planning for freight.	**Mostly endorse**	Future of Freight commits to: • Call for evidence on freight planning issues, to inform planning reform opportunities. • Review Planning Practice Guidance to better support freight and logistics. • Consultation and update of Local Transport Planning guidance by end 2022. • Increase communication and engagement between freight industry developers and planning authorities.

5. **New and Better Data:** Government should develop a data standard for freight data collection to support local authorities, outlining the requirements for technological capability, data requirements, and data format. Such a standard must seek to ensure consistent data quality and format across technologies to allow regional and national aggregation, and should be complete by the end of 2020.	**Partially endorse**	Future of Freight commits to: • Test with industry agreed 'proofs of concept' for improving data exchange to identify data sources that will help to create many of the digital and connected services in the future for freight and logistics. • Work with industry to improve the valuation of freight methodologies used as part of infrastructure investment decisions.
6. **A New Status for Freight:** Government should establish a new biannual 'Freight Leadership Council', inviting representatives from BEIS, DfT, MHCLG, DEFRA and HM Treasury, devolved administrations, all freight modes and parts of the supply chain. This Council's main focus should be on strategic, long-term issues –specifically supporting decarbonisation of road and rail freight by 2050. This Council should hold its first meeting before the end of 2020.	**Fully endorse**	Future of Freight builds on the initial success of the Freight Council, established in June 2021, via the appointment of a strong independent co-chair and establishing delivery groups, to ensure an enduring partnership model capable of implementing Future of Freight.

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Jones Lang LaSalle Incorporated

Logistics Need and Market Demand Statement

Newark & Sherwood Draft Amended Allocations and Development Management DPD (Regulation 19)

Statement to support representations by Delta Planning on behalf of Tritax Big Box REIT and Simons Developments

January 2023

Contents

1. Introduction

1.1. The purpose of this statement is to support representations being made by Delta Planning on behalf of Tritax Big Box REIT and Simons Developments. The representations object to the lack of any new employment allocations being made for Newark and, specifically, the omission of Land East of Newlink Business Park.

1.2. Land East of Newlink Business Park acts as a natural extension to Newlink Business Park and is being promoted particularly for its suitability and attraction to the Big Box logistics market sector. A masterplan of the site is provided in **Appendix 1**. The site has a gross area of 47 hectares and is currently planned to accommodate three units, ranging in size from 395,000 sq ft to 517,000 sq ft.

1.3. The scope for this statement is three-fold: -

- Review of the need for large scale logistics for Newark and the wider area.
- Review of market demand.
- Review of the candidate sites in Newark to meet the identified need and demand for large scale logistics.

1.4. The need for large scale logistics is set out in the recently produced Nottingham Core and Outer HMA Logistics Study. This is reviewed in Section 2.

1.5. Section 3 of this statement provides an update on market demand for large scale logistics. This looks at the latest trends at a national, regional (East Midlands) and sub-regional (A1) level.

1.6. Section 4 assesses the supply of sites in Newark as to their suitability, capacity and deliverability to meet the identified need and demand for large scale logistics. This includes existing consented and allocated sites and the opportunity which exists at Land East of Newlink Business Park.

1.7. Section 5 sets out our principal findings and makes recommendations.

2. Nottinghamshire Core and Outer HMA Logistics Study

Context

2.1. The Draft Amended Allocations and Development Management DPD is a Part 2 development plan. The Part 1 development plan is the Amended Core Strategy DPD, which was adopted in March 2019.

2.2. The evidence base on employment land, and the logistics sector, has moved on considerably from this point. Specifically, there has been the production of two studies: -

- Nottingham Core HMA and Nottingham Outer HMA Employment Land Needs Study, Lichfields, May 2021.
- Nottingham Core and Outer HMA Logistics Study, Iceni, August 2022.

2.3. The former assesses the need and supply of employment land for each level planning authority in the County of Nottinghamshire and then balances the two to establish if there is a shortfall or surplus. However, the Study does not seek to assess the need for strategic logistics, with this sector not taken into account in its appraisal of need.

2.4. As such, it recommends that the constituent Local Planning Authorities of the County commission *"a further strategic Study to quantify the likely extent of national/regional B8 logistics need across the core/outer HMAs"*. (Paragraph 10.25). It adds further that *"the future Study should seek to quantify the scale of strategic B8 required and potentially identify sites where this need should be allocated"*.

2.5. The latter Study is the product of this recommendation. It was commissioned by the County Council on behalf of the core and outer authorities, including Newark & Sherwood District Council.

Purpose and Scope

2.6. The purpose of the Study is set out by paragraph 1.2 of the Study. It is to understand the future demand for strategic warehousing and logistics facilities within the Study Area.

2.7. Its objectives include: -

- To confirm the baseline strategic stock position and current role of logistics floor space.
- To confirm future need, demand and growth in the strategic distribution/logistics sector in the Study Area to 2040.
- Recommend a sound approach to sustainably plan for and manage logistics growth over the period to 2040.

2.8. To meet these objectives, a number of activities were undertaken by the Study. These include: -

- Assessment of future land supply within the Study Area.
- Estimates of future strategic warehousing need through the use of different models.
- Summary of model scenarios and implications for need derived from the supply/demand balance.
- Identification of Areas of Opportunity for future development of logistics units and criteria for their site selection.

2.9. These elements are reviewed in turn below.

Supply

2.10. Data on supply has been provided by the constituent local planning authorities within the Study Area. This data reflects the latest available supply position to date up to the end of the 2021/2022 monitoring year.

2.11. Table 5.1 provides a summary, broken down by Local Planning Authority. For ease of reference, this is cut and pasted below:

Table 5.1 Supply position summary table, for units above 9,000 sqm (sqm)

	Unimplemented permissions	Notes	Allocations	Notes	Future pipeline	Notes	Total
Ashfield	31,702	Castlewood Business Park V/2018/0652 and V/2021/0362	48,707	West of Fulwood (Off Export Drive) / plus half of Harrier Park (access constrained / half B2)	185,600	draft allocations at J27 and Whyburn Farm (half Whyburn assumed large B8)	266,009
Broxtowe							0
Erewash					110,000*	Indicative, based on New Stanton Masterplan large units only	110,000
Gedling							0
Mansfield					13,200	Penniment Farm. Unit 1	13,200
Newark & Sherwood	110,000	10/01586/OUTM from NAP2A, South of Newark	21,000	NUA/E/2 land remaining	63,834	21/02408/FULM Land off Brunel drive	194,834
Nottingham	22,954	18/01455/POUT Local Plan Part 2 Site SR46			17,000	Blenheim Lane (estimated)	39,954
Rushcliffe	49,870	South of Clifton 14/01417/OUT 24,443 remaining plus 21/02346/REM includes one unit as 9,437sqm). Former RAF Newton 10/01962/OUT has a reserved matters application (22/01468/REM) which specifies 16,000 sqm of B8 in one unit.	31,000	Half of the North of Bingham allocation	180,000	Ratcliffe on Soar Power Station 180,000, further strategic sites known to be promoted for storage and distribution	260,870
Total	214,526	0	100,707		569,634		884,867

Source: Local Authority data & Iceni analysis

2.12. Paragraph 5.6 notes that some of the supply identified in Table 5.1 is already captured in the general employment supply set out in the 2021 Nottingham Core HMA and Nottingham Outer HMA Employment Land Needs Study. This would appear to be the case with Newark & Sherwood, which identifies three sites, as follows: -

- Land south of Newark –an implemented planning permission of 110,000 sq m.
- Land west of Stephenson Way, Newark –allocation of 21,000 sq m.
- Land off Brunel Drive, Newark –outstanding planning application for 63,834 sq m.

2.13. It is to be noted that the Draft Amended Allocations & Development Management DPD identifies an overall supply of 123.71 hectares for the Newark Area. This includes Land south of Newark (50 hectares), Land west of Stephenson Way (6.85 hectares) and Land off Brunel Drive (15.61 hectares). None of the remaining provision is deemed by the Logistics Study as being potentially suitable for Big Box distribution. This is probably due to the size of the plots, their proposed use (e.g NAP2C –allocated for just B1), their setting (i.e as part of a mixed development –e.g NUA/NU/1) or a combination of these elements.

Demand/Need

2.14. The Study assesses need by a variety of different methods. These include labour demand, past completions trend, net absorption rates, traffic growth and replacement demand, and market signals. A summary of the output of these different methods is provided in Table 9.1 of the Study. This is provided below:

Table 9.1 Range of modelled large scale logistics unit needs (sqm)

	Study Area 2021-40	Need with Margin
Labour demand	-51,000	135,000
Completions Annualised	707,000	893,000
2012-21 Net absorption (+	554,500	731,400
2017-21 Net absorption (+	927,300	1,113,300
TGRD Low	574,000	760,000
TGRD Central	744,000	930,000
TGRD High	1,084,000	1,270,000
Share of M1 J24-28	1,600,000	1,786,000
Increased delivery relative to Notts / L&L	1,300,000	1,486,000

Source: Various, see previous sections

2.15. The Study recommends that the most appropriate range is 1,270,000 sq m to 1,486,000 sq m. These reflect models based on high traffic growth and replacement demand and market signals. For planning purposes, the Study recommends use of the higher figure –1,486,000 sq m. This will require a land area of 425 hectares at a plot ratio of 35%.

Balance between Demand and Supply

2.16. A summary of the demand and supply balance is provided by Table 9.2 of the Study. This is cut and pasted overleaf:

Table 9.2 Study area demand and supply balance

	Sqm	Ha@0.35
Permissions + Allocations	315,233	
Demand	1,486,000	
Residual need	**1,170,767**	**335**
Future pipeline	569,634	
Residual need inc draft allocations / permissions and	**601,133**	**172**

2.17. The balancing exercise concludes that there is a substantial residual need. This residual need equates to just over 600,000 sq m. This would require the allocation of a further 172 hectares (at a plot ratio of 35%).

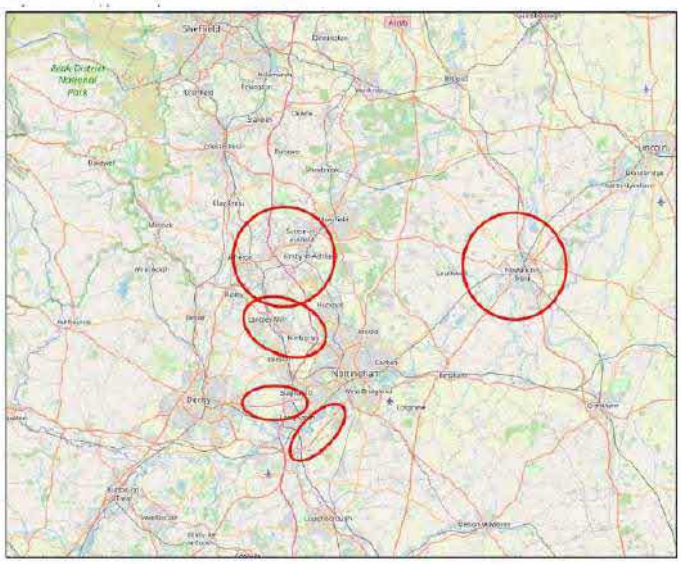
Areas of Opportunity

2.18. The Study identifies five Areas of Opportunity. These are broad areas across the Study Area where new strategic logistics sites should be located. The following criteria have been used to identify these broad areas: -

- Good connections with the strategic highway network.
- Appropriately located relative to the markets to be served.
- There is a known under-provision of strategic sites.
- Accessible to labour and located close to areas of employment need.

2.19. The five identified Areas of Opportunity meet all of these criteria. Table 10.1 of the Study provides a map showing the selected areas. This is cut and pasted below:

Table 10.1 Map: Areas of Opportunity



2.20. Four out of the five Areas of Opportunity are located on the M1 motorway. The fifth Area of Opportunity is the area surrounding Newark (along the A1 and A46).

2.21. Paragraph 10.9 provides some reasoning to the selection of Newark as an Area of Opportunity. It reads: -

> "*Whilst Newark is some distance from the M1 it still serves as a successful logistics location as can be demonstrated through its historic delivery of large units. The A1 route is now a popular artery and Newark supplies a local labour market to support demand for units which may (but not necessarily) tend to the lower scales than those on the M1 but still substantially above the threshold considered herein*".

2.22. The Study also recommends that Local Planning Authorities should take a criteria based approach when identifying and assessing potential new sites for new large warehouses. These are detailed in paragraph 10.11 of the Study and are summarised below: -

- Close to a junction on the motorway network or long distance dual-carriageway with sufficient network capacity.
- Sufficiently large and flexible in configuration so it can accommodate a range of size of units, with a minimum size of 25 hectares.
- Connected to the National Grid with sufficient capacity for power supply.
- Accessible to labour.
- Located away from incompatible land uses.

2.23. The Study also sets a sequential order for the identification and allocation of new sites. This sequential order is set out by paragraph 10.12. It is as follows: -

- Extension to existing industrial/distribution sites.
- New strategic sites on previously developed land.
- New strategic sites on greenfield sites.

2.24. These criteria and the recommended sequential order are reviewed further in Section 4, when consideration is given to the current supply of sites in Newark and the proposed site at Land East of Newlink Business Park.

3. Logistics Market for Newark

3.1. The logistics market for Newark cannot be considered in isolation. Instead, because of the strategic nature of the Big Box market, a perspective of market trends at a national, regional and sub-regional level is required. This is provided below in turn.

National Trends

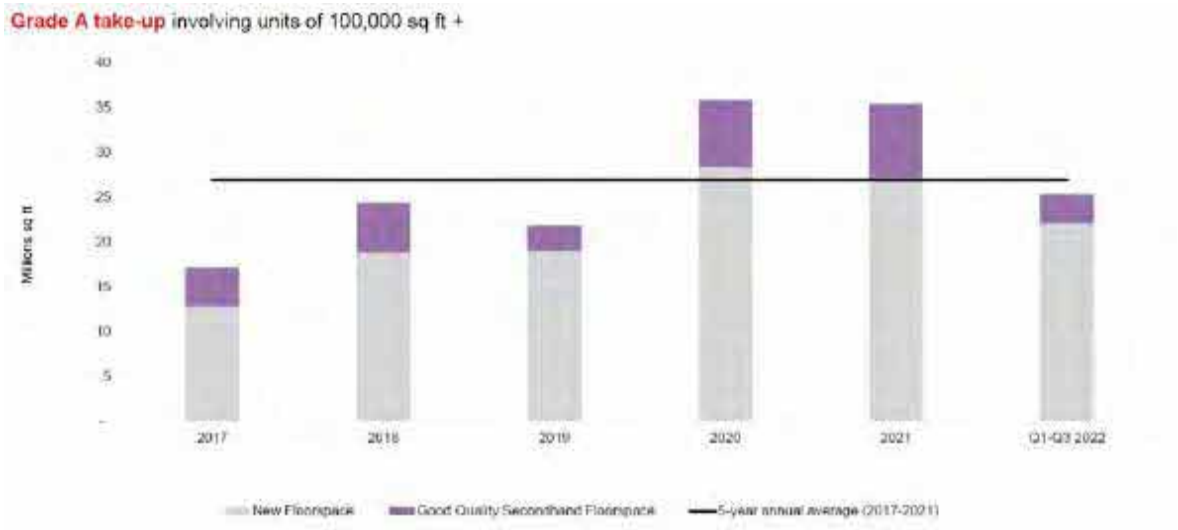
3.2. JLL produces a number of research summaries on the industrial and distribution market. This includes the UK Big Box Logistics Market Update, which is produced on an annual basis with quarterly updates. It provides a comparison of market signals for industrial and distribution units over 9,290 sq m (100,000 sq ft) in the UK. The latest quarterly update, published in October 2022, is provided in **Appendix 2**.

3.3. The headlines to this update, with regards demand, are as follows: -

- Grade A occupier take-up in Q3 2022 reached 8.6 million sq ft.
- This was 5% up on Q2 and 22% up on the previous five year quarterly average.
- 81% of new take-up in Q3 2022 was for new buildings.
- Logistics has overtaken retailing as the key sector.
- There has been a diversification in the market, with less reliance on the e-commerce sector.
- Speculative built space continues to outstrip the development of build to suit units.

3.4. In summary, despite economic headwinds, occupier demand for large logistics buildings remains strong as companies continue to add capacity to their networks to accommodate growth, plug gaps or improve their service offer. Demand continues to outstrip supply with availability of new floor space remaining limited. This imbalance has continued to place upward pressure on rents and residual land values.

3.5. The extent of the increase in take-up of Big Box units, at a national level, is illustrated by the bar chart below, taken from the JLL Update Report.



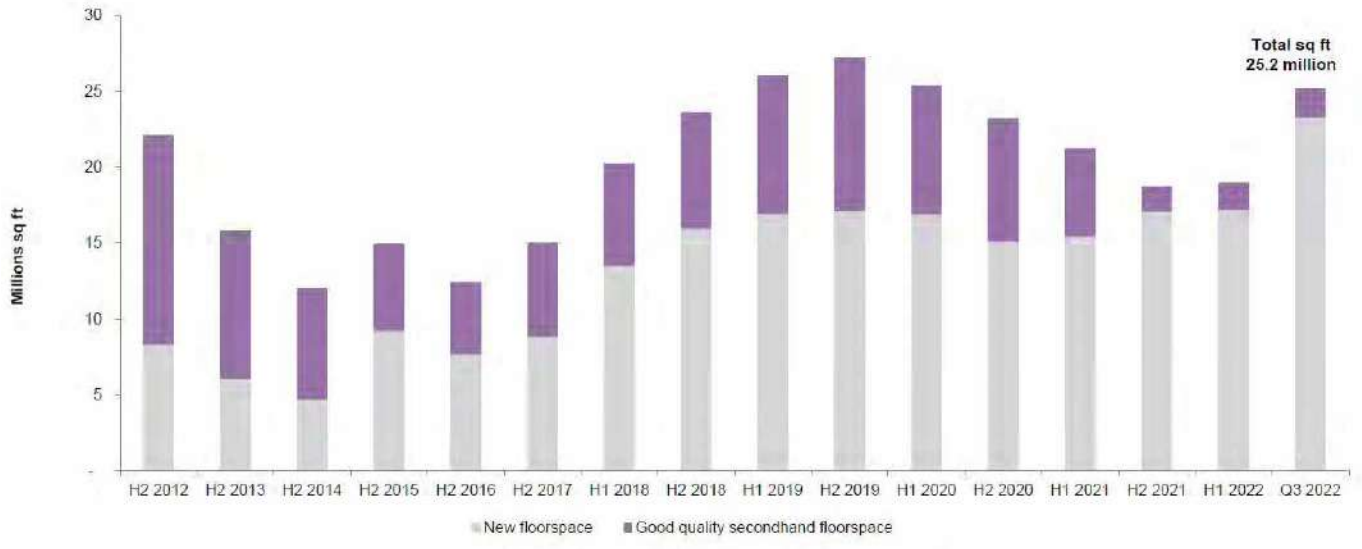
3.6. It is to be emphasised that the market was experiencing a healthy level of demand in the years prior to 2020. Since 2020, there has been a quantitative step change in take-up, with this projected to continue in 2022 (the update only records take-up up to the end of September).

3.7. Qualitatively, demand has been more diverse. In 2020 and 2021, over 40% of all take-up was internet related. Over the first three quarters of 2022, this had fallen to 10%. Partly, this is due to high inflation and low consumer confidence adversely affecting retail sales. However, overall take-up levels have been resilient. This is due to the market seeing rising demand from new or relatively new sectors. Examples include: -

- Tophat, modular housebuilder, taking 650,000 sq ft at Magna Park, Corby.
- BritishVolt, battery cell manufacturer, leasing 259,510 sq ft at Hams Hall.
- Arrival, electrical vehicle manufacturer, taking 503,555 sq ft over three buildings in Banbury and Bicester.
- Tevva, EV truck manufacturer, leasing 111,000 sq ft at Tilbury.

3.8. The increase in demand over the last three years, albeit from a very steady base over the preceding 4/5 years, has understandably led to greater market confidence. This has resulted in a significant rise in speculative development. Just over half (55%) of the new floor space taken up in the first three quarters of 2022 was in speculatively built units. Since the start of 2021, speculatively built units have accounted for a greater share of new floor space taken. Prior to 2021, most new units were built to suit.

3.9. At the national level, fluctuations in available supply since 2012 are shown on the graph below:



3.10. The supply of available Grade A floor space has reduced considerably from a high point in 2019 (of circa 27.5 million sq ft) to a low point at H1 2022 (of circa 19 million sq ft). Over Q3 2022, supply has increased to 25.2 million sq ft. However, to put this into context, this represents only about one year's take-up (employing the five year annual average for 2017-2021).

3.11. 23.2 million sq ft of the available supply of 25.2 million sq ft comprises new floor space. This equates to over 90% of all available floor space –a significantly greater percentage than experienced in the years prior to 2021.

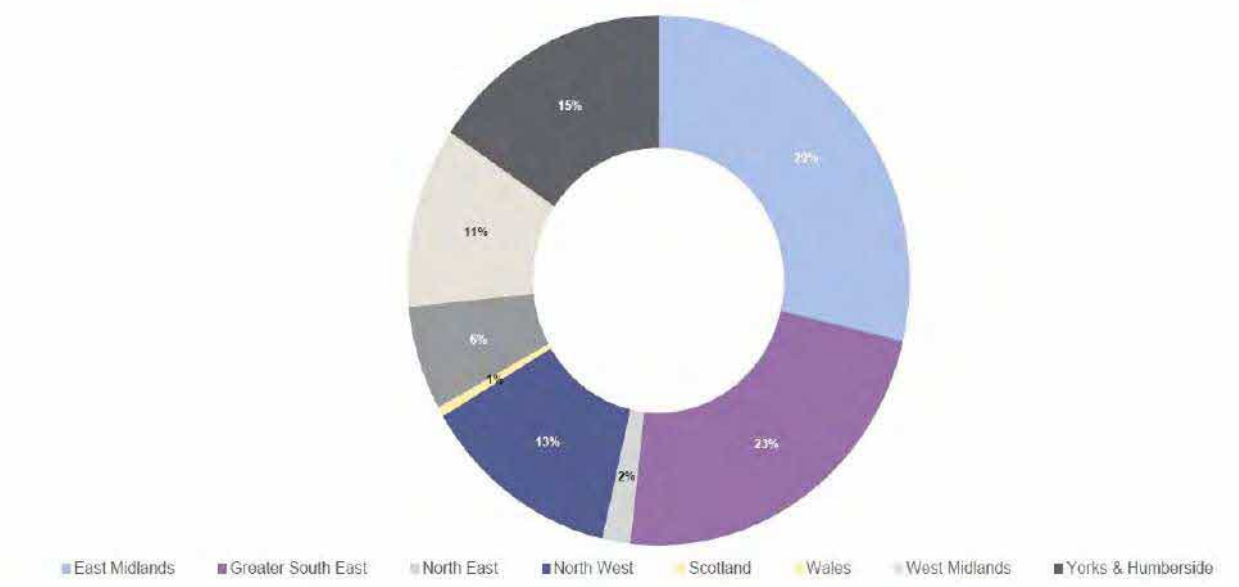
3.12. Much of the new floor space is being constructed speculatively. At the end of Q3 2022, 74% of new floor space (i.e 18.6 million sq ft) was speculatively under construction. This demonstrates the confidence of investors and developers in this market sector.

3.13. The balance between demand and supply can be gauged by movements in rents. Across the UK, prime headline rents for Big Box units have increased by 11.3% in the nine month period to September 2022 and by 16.3% over the 12 month period to Q3 2022.

3.14. The anticipated slowdown in economic growth and weakening of business confidence could challenge occupational demand in 2023. In addition, supply looks likely to edge up in the short term, due to the volume of speculative completions. As a result, rental growth looks set to moderate compared with the surge the market has seen over the past couple of years. This suggests some change in the market balance in the short term. However, JLL remains confident that occupational demand over the medium term will continue to be supported by the requirements of occupiers to build resilient and sustainable supply chains that are able to meet the continuing, and often changing, needs of customers.

Regional

3.15. The JLL quarterly update provides a breakdown of take-up by region. This is represented by the chart below.



3.16. The East Midlands accounts for the largest share of the market, representing 25% of all the take-up in the UK. This follows the trend of previous years, with the East Midlands being the most dominate regional market. The proportion of take-up accounted for the East Midlands has ranged from 26% to 43% since 2018.

3.17. The relative strength of the market for the East Midlands is due to its centrality in the UK and its communications. The latter is provided primarily by the M1 motorway, which connects many of the major markets (including London) and other principal elements of the motorway and strategic road network (e.g M6, A14, M25 and A50).

3.18. The East Midlands market is supported also by the A1. The A1 corridor is an important secondary market for logistics, with established nodes at Doncaster, Corby, Peterborough and Newark. Whilst not witnessing the same levels of take-up as the prime M1 corridor, it has attracted significant investment from the logistics sector. This market is now considered in greater detail.

Sub-Regional

3.19. The A1 corridor holds different characteristics to the M1 corridor and this has helped to drive demand. These characteristics include: -

- Proximity to the East Coast ports.
- Better availability of labour.
- Discount in term of price (i.e rent or land value).
- Availability of some larger plots, including an opportunity to buy land.

3.20. In addition, JLL is receiving a number of enquiries on schemes it is marketing whose search areas are now expanding beyond the M1 corridor. This is due to a shortage of viable options along the M1.

3.21. Over the last six years, take-up along the A1 has been very healthy. This is summarised below in Table 1.

Table 1 –Summary of Take-Up of Big Boxes along the A1 corridor from 2017 to 2022

Year	Number of Transactions	Floor Space Taken (Sq Ft)
2017	8	2,226,250
2018	7	3,146,542
2019	5	2,423,450
2020	6	1,517,731
2021	12	4,422,286
2022 (up to September 2022)	8	2,961,806
Total	**46**	**16,698,065**

3.22. 2021 and the first three quarters of 2022 has seen a significant uptake in occupation along the A1 corridor, with over 7.4 million sq ft transacted. The 4.4 million sq ft transacted in 2021 represented 12.5% of the overall take-up of Big Box units in the UK in 2021. This is a significant level of activity and illustrates the emergence of this location as an alternative to the M1.

3.23. The principal deals recorded for 2021 and 2022 (to September) are set out in Table 2.

Table 2 –Transactions for Big Boxes along the A1 corridor in 2021 and 2022

Scheme	Occupier	New/Second Hand	Sector	Floor Space (sq ft)
Peterborough 736, Kingston Park, Peterborough	Amazon	Second hand	Retail	736,708
Mulberry Logistics Park, Doncaster	Culina	New	Logistics	565,000
Mulberry Logistics Park, Doncaster	Eddie Stobart	New	Logistics	565,000
Peterborough Gateway, Peterborough	Oatly	New	Retail	385,000
Gate 4, Doncaster	Geodis	New	Logistics	411,470

Scheme	Occupier	New/Second Hand	Sector	Floor Space (sq ft)
NP164, Nimbus Park, Doncaster	Mosaic Tile Company	New	Retail	164,000
Rockingham 528, Corby	Wincanton	Second hand	Logistics	528,108
Arrow 248, Unit 4 Midlands Logistics Park, Corby	Smyth Toys	New	Retail	248,000
iPort, Doncaster	Dusk Retail	New	Retail	120,000
G Park, Doncaster	Lumria DX	New	Other	278,000
Peterborough Gateway, Peterborough	MH Star	New	Retail	226,000
iPort, Doncaster	Woodland Group	New	Logistics	195,000
Delta Park, Peterborough	Crown Holdings	New	Manufacturer	625,000
Mammoth 602, G-Park, Doncaster	Maersk	New	Logistics	601,750
G-Park, Doncaster	McGregor Logistics	Second hand	Logistics	279,000
iP1A, iPort, Doncaster	Euro Pool Systems	New	Logistics	116,791
Magna Park, Corby	Tophat	New	Manufacturer	650,000
iP1B, iPort, Doncaster	Woodland Group	New	Logistics	130,458
Symmetry Park, Doncaster	B&Q	New	Retail	430,240
Orton 130, Peterborough	Yours Clothing	Second hand	Retail	128,567

Source: JLL

3.24. As referred to above, the principal nodes along this stretch of the A1 are Doncaster, Corby and Peterborough. Table 3 below provides an analysis of take-up at these nodes over the last six years.

Table 3 –Analysis of Take-Up at Principal Nodes along the A1 from 2017 to 2021

Node	Number of Transactions	Floor Space Taken (Sq Ft)
Doncaster	19	6,426,138
Corby	12	4,454,375
Peterborough	13	5,145,456

Source: JLL

3.25. Over the same period, Newark has not been able to attract any such deals. JLL considers that this is not due to its attractiveness as a location. Instead, it is a direct result of a lack of deliverable sites.

3.26. This view is shared by Fisher German, who were commissioned by the Council to provide a market-based report to support the Council's consideration of a planning application for a unit of 395,000 sq ft at land east of Newlink Business Park (Ref No: 20/01452/OUTM). This application was refused by the Council, against an officer's recommendation for approval, but was subsequently approved after a successful appeal (Ref No. APP/B3030/W/22/3292692).

3.27. JLL considers that Newark shares the same communications advantages as Doncaster, Corby and Peterborough for this sector of the market. Fisher German concurred with regards to Corby and Peterborough and pointed out that Newark benefits also from being located at the junction of the A1 and A46. This view is endorsed by the Nottingham Core and Outer HMA Logistics Study of August 2022 (as summarised by the previous section), which identifies Newark as one of the five Areas of Opportunity for logistics-based development.

3.28. The analysis provided above in Table 3 gives an illustration of the scale of market opportunity that has bypassed Newark over the last six years. It also points towards the potential scale of future demand if a sufficient range and quality of deliverable sites can be brought forward. This is considered in greater detail in the next section.

Summary

3.29. It is clear from the evidence presented that the market for Big Box logistics remains very strong. Demand is at an unprecedented level and continues to outstrip supply, with this being demonstrated by the high level of take-up, the low and reducing amount of supply, significant increases in speculative developments, and increased rents.

3.30. The inventory of consented and allocated development land has eroded considerably. Essentially, the development plan system has been completely outpaced by the market.

3.31. The East Midlands remains the strongest region for take-up. The A1 corridor is an increasingly important sub-market. Whilst secondary to the prime pitch of the M1, it has captured significant levels of investment, particularly at established nodes at Doncaster, Corby and Peterborough. 12.5% of all take-up in the UK in 2021 took place at these three centres.

3.32. This illustrates the lost opportunity at Newark, which shares the same attributes possessed by Doncaster, Corby and Peterborough. This lost opportunity does not relate to demand but due to a lack of suitable and deliverable sites. This is now considered in the next section.

4. Candidate Sites in Newark

Context

4.1. The Nottinghamshire Core and Outer HMA Logistics Study identifies a potential supply of 194,834 sq m of floorspace serving potentially the need for logistics for Newark. This is made up of three sites: -

- Land South of Newark –an unimplemented planning permission for 110,000 sq m.
- Land West of Stephenson Way, Newark –allocation for 21,000 sq m.
- Land off Brunel Drive, Newark –outstanding planning application for 63,834 sq m.

4.2. The suitability of these sites to meet demand for logistics over the plan period is considered in greater detail below. However, prior to this consideration, it is to be emphasised that the Logistics Study recommends the identification of Newark as an Area of Opportunity to help meet the overall shortfall of 600,000 sq m over the study area (i.e Nottinghamshire) in full knowledge of these sites. This implies strongly that other or further sites in Newark should be identified to meet this residual need.

4.3. In addition, the Logistics Study recognises (in paragraph 5.6) that some of the consented or allocated land, which makes up the supply, would be required to meet also wider employment needs identified by the Nottingham Core HMA and Nottingham Outer HMA Employment Land Needs Study of 2021. In the case of Newark, this study identifies a need of between 56 hectares and 120 hectares for the offices, industrial and distribution sectors, depending on what projection method is used.

4.4. The Logistics Study also provides criteria for identifying and assessing potential sites. These are provided in paragraph 10.11 of the study and reproduced in paragraph 2.22 of this statement. They include access to the motorway/strategic road network, scale (a minimum of 25 hectares), access to power supply, and locations away from incompatible uses (e.g housing). Paragraph 10.12 of the study also sets a sequential order, with extension to existing distribution sites the first preference.

4.5. The Logistics Study identifies only the three sites referred above as being suitable for Big Box logistics. By implication, other sites forming part of the employment land supply for the Newark area, as referenced by the Draft Amended Allocations & Development Management DPD, have been deemed to be unsuitable because they do not meet the criteria referred to above.

Land South of Newark

4.5. The essential planning details for this site are as follows: -

- Allocation of 50 hectares (125 acres).
- Planning permission granted in 2011 for 1.5 million sq ft of B1, B2 and B8 floor space as part of a wider residential led southern extension to Newark.
- Planning permission granted in 2015 to increase the capacity of development to 2 million sq ft.

4.6. The wider proposals require the construction of a road connecting the proposals to the A1 and A46 – the Southern Link Road (SLR). Only one section of the SLR has been built so far (opening in 2016/2017). The sections connecting the employment site to either the A1 or A46 have not been completed and are not currently under construction.

4.7. The current connection of the employment element of the site to the A1 is unsuitable for large volumes of commercial traffic. It is accepted that unless or until this connection is in place, the site will not be feasible or suitable for most commercial operators.

4.8. There is still a large degree of uncertainty about the programme of the completion of the SLR. This has been principally due to issues of funding. There is a funding gap of £39 million. In October 2021, the then Chancellor of the Exchequer announced the successful Levelling-up Fund (LUF) bids. This included £20 million for the SLR. However, it remains unclear whether this is sufficient to fully fund the scheme and, if not, where and when the remaining funds will be forthcoming.

4.9. If the funds are fully in place, a number of stages need to be undertaken prior to the SLR being completed. These are: -

- Survey work (e.g ecological and archaeological studies).
- Approval of any outstanding design matters (e.g a new roundabout where the SLR meets the A1).
- Tendering and letting of the contract for the road's construction.
- Phased construction of the remaining elements of the SLR.

4.10. As far as JLL is aware, there is no published or agreed timetable for this programme of works. In addition, there is no publicly available information on how the SLR will be phased. The latest marketing details produced by the agents for the site (Newark Gateway) were produced in January 2018. A copy is provided in **Appendix 3**. These provide no details of when the SLR will be built. As far as JLL is aware, no update to these details have been produced or circulated.

4.11. Given the scale of the remaining elements of the SLR, this is a project that will take some time to progress to its completion. The Council has suggested that the SLR could be completed within two years of the funding being committed. This seems optimistic to JLL and that up to five years is much more likely to be realistic.

4.12. Until there is much greater certainty about Land South of Newark being properly connected to the A1 and A46, we do not see operators being attracted to this site. As such, we consider it is an opportunity for the medium term at best.

Land West of Stephenson Way, Newark

4.13. This is made up of two sites, which combined form Employment Site 2 in the draft Amended Allocations (Policy NUA/E/2). They comprise undeveloped land from allocations from the previous Allocations and Development Management DPD, adopted in 2013.

4.14. The two parcels of land are separated and provide just 6.85 hectares of development land. This falls substantially short of the minimum requirement for site area recommended by the Logistics Study of 25 hectares. As such, these two sites are likely to be more suitable to accommodate wider employment needs rather than the identified needs of the logistics sector.

Land off Brunel Drive, Newark

4.15. Like Land South of Newark, this site was originally granted planning permission some time ago. It was granted outline planning permission in September 2006. This permission was an extension to an earlier permission, which was granted in 1995.

4.16. The site has been promoted since the mid-2000s by GLP. However, this has led to no transactions. Whilst the site has reasonable scale, access to the site from the A1 is not straightforward, routing via the A46, Lincoln Road (B6166), Brunel Drive and Jessop Way. Fisher German, in their report to the Council on the application to extend Newlink Business Park (Ref No. 20/01454/OUTM), concluded that the site was "heavily constrained by the access route".

4.17. The site is now being promoted by BGO Ark Propco Ltd and Equation Properties as Newark Logistics Park. A detailed planning application was submitted in late 2021 (21/02408/FULM) and approved in July 2022. The proposals are for two units: -

- Unit 100 –527,000 sq ft.
- Unit 200 –170,000 sq ft.

4.18. JLL is marketing the scheme. A copy of the marketing brochure, including a proposed site plan for the scheme, is provided in **Appendix 4**.

4.19. Currently, the site promotors are in negotiations with an end user for a single unit of 735,000 sq ft. To enable this deal, a s.73 planning application to amend the July 2022 planning permission was submitted to the Council in November 2022 and is awaiting determination. If this pre-let deal is concluded, this will exhaust all available development land.

4.20. If the deal with the end user is not completed, then JLL understands that the site promotors will speculatively build out the two unit scheme. Either way, the site will be developed out in the short term, with this demonstrating the strength of demand for large scale logistics for Newark.

Land East of Newlink Business Park

4.21. The current offer by Newark for large scale logistics is restricted to Land South of Newark and Newark Logistics Park. For the reasons already stated, we do not consider these provide an adequate scale or choice of sites.

4.22. The previous section illustrates the potential scale of demand at Newark through analysis of other nodes on the A1 corridor –Doncaster, Corby and Peterborough. These three nodes have each attracted between 4.5 million and 6.4 million sq ft of take-up of Big Box floor space over the last six years.

4.23. As such, we consider further sites should be identified. This consideration should include Land East of Newlink Business Park.

4.24. The site has a gross site area of 45 hectares. It meets fully the requirements for scale (i.e 25 hectares) set by the Logistics Study.

4.25. Currently, a three unit scheme is proposed providing a total floor space of 1.36 million sq ft. A master plan is provided in **Appendix 1**. The proposed unit sizes are: -

- Unit 1 –395,417 sq ft
- Unit 2 –517,357 sq ft
- Unit 3 –447,942 sq ft

4.26. Unit 1 has received planning permission following a successful planning appeal. Discussions with an end user already well established in Newark are progressing and the promoters are hopeful that this will result in a pre-let.

4.27. If this deal does not progress, the site promoters are committing to speculatively constructing the unit.

4.28. As part of the proposals, a new roundabout access to the site on the A17 is proposed. This will ensure unrestricted access to the A1 and A46 at the nearby interchange, 0.5km to the west. This interchange is proposed to be improved, along with the A46 Newark Northern By-Pass, as part of the Government's Road Investment Strategy, with its funding confirmed in the Budget of March 2020.

4.29. The site is located immediately to the east of Newlink Business Park. This is an established location for Big Boxes, being the National Distribution Centre for Currys.

4.30. The site is unconstrained in terms of technical issues. This includes: -

- Landscape and visual impact.
- Ecology.
- Archaeology and cultural heritage.
- Flood risk and drainage.
- Ground conditions.

4.31. The site is located away from built settlement. This will allow 24 hours operations on an unfettered basis and without any adverse effect upon residential amenity.

4.32. The site is in the control of Tritax and Simons Developments. Both are experienced developers and investors in the Big Box sector. Tritax owns the adjoining warehouse occupied by Currys.

4.33. For these reasons, we consider the site represents a clear strategic market opportunity. It stands out in comparison to consented or allocated sites which form the existing supply of employment land in the district.

4.34. It will prove to be very attractive to the Big Box market to both local and inward investment. It will transform the offer Newark presents to the marketplace for Big Boxes, given its location, situation, access and scale.

4.35. The site meets all the requirements set out for candidate sites by the Logistics Study, particularly in terms of scale, access and its location away from built settlement. It will act as a natural extension to Newlink Business Park, an established logistics centre. Therefore, it would be a preferred site, sequentially, over other less well located sites.

5. Principal Findings and Recommendation

5.1. The evidence base on employment land has moved on considerably since the adoption of the Amended Core Strategy in 2019. Specifically, the Nottingham Core and Outer HMA Logistics Study of August 2022 has made some important findings and recommendations.

5.2. The Logistics Study has concluded that there is a need of 1,486,000 sq m of B8 floor space for the study area –i.e the county of Nottinghamshire. The study has identified a maximum supply of 885,000 sq m, resulting in a residual need of at least 600,000 sq m.

5.3. The Logistics Study identifies five Areas of Opportunity. One of these is Newark.

5.4. The Logistics Study also provides criteria for the identification and selection of suitable sites. These include scale (a minimum of 25 hectares), direct access to the motorway and strategic road network, and locations away from built settlement. It also prioritises extensions to existing industrial/distribution sites.

5.5. The market for Big Box logistics remains very strong. Demand is at an unprecedented level and continues to outstrip supply, with this being demonstrated by the high level of take-up, the low and reducing amount of supply, significant increases in speculative developments, and increased rents.

5.6. The inventory of consented and allocated development land has eroded considerably. Essentially, the development plan system has been completely outpaced by the market.

5.7. The East Midlands remains the strongest region for take-up. The A1 corridor is an increasingly important sub-market. Whilst secondary to the prime pitch of the M1, it has captured significant levels of investment, particularly at established nodes at Doncaster, Corby and Peterborough. 12.5% of all take-up in the UK in 2021 took place at these three centres.

5.8. This illustrates a lost opportunity at Newark, which shares the same attributes possessed by Doncaster, Corby and Peterborough. This lost opportunity does not relate to demand but due to a lack of suitable and deliverable sites.

5.9. Newark lacks a suitable scale and range of sites to meet demand for Newark. This is acknowledged by the Logistics Study which identifies Newark as an Area of Opportunity for further sites in full knowledge of committed sites at Land South of Newark and Land off Brunel Drive, Newark. Additional sites, which meet the criteria set out by the Logistics Study, will need to be identified by development plans.

5.10. Land East of Newlink Business Park meets all the criteria set by the Logistics Study. Its principal attributes include: -

- Scale –at 47 hectares it easily exceeds the threshold set (i.e 25 hectares).
- Access –direct access to the A17, close to the junction of the A1, A17 and A46.
- Amenity –a location away from built settlement.

5.11. The site acts as a natural extension to Newlink Business Park, an established logistics location being the national distribution centre for Currys. Sequentially, it is a preferred location over other less well located sites.

5.12. For these reasons, we conclude that Land East of Newlink Business Park represents the best site in Newark to meet both the need and demand for logistics in this Area of Opportunity. As such, we recommend that this site is allocated for this use.

Appendix 1 – Masterplan of Land East of Newlink Business Park

Rev	Date	By	Description
A	17/12/21	KK	Unit 2 update reduced to 500k
B	04/01/22	KK	Unit 2 layout update, more woodland at southern boundary.
C	10/01/22	KK	Woodland revised.

NOTE: The status of this drawing is preliminary and therefore information to be considered as indicative only.

Indicative Area Schedule

Unit 1 - 395,417ft²
NSA - 16.61Ac

Unit 2 - 517,387ft²
NSA - 21.36Ac

Unit 3 - 447,942ft²
NSA - 18.18Ac

Total GIA - 1,360,746ft²

Total NSA - 56.15Ac

GSA - 116.16Ac

Waterfront House
2a Smith Way
Grove Park
Enderby
Leicester LE19 1SX

t: +44 (0)116 247 0557

www.stephengeorge.co.uk

Newark
A17 / A1 / A46 Junction

Drawing Name:
Newark Masterplan December 2021

Drawing Status:	Preliminary
Suitability:	Information
Rev:	B
SGP Project:	16-233-F020
Drawn:	KK
Team:	MMS
Date:	04/01/2022
Scale:	1:2000 @A1

Drawing Number:
16233- SGP- XX- XX- DR- A- F020-001

Appendix 2 –Big Box Logistics Market Update, JLL, October 2022

UK Big Box

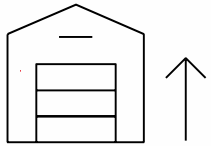
Logistics Market Update

October 2022

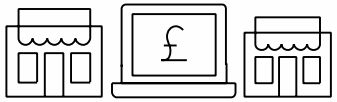
Source: Prologis: Royal Mail, DIRFT

Headlines

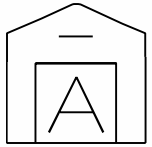
The key **headlines** from Q3 2022 are:



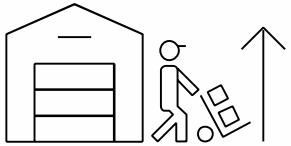
Occupier take-up in Q3 2022 reached 8.6 million sq ft – 22% up on the previous five-year quarterly average, and 5% up on the previous quarter. This brings the year-to-date total to 25.3 million sq ft compared with a full-year figure of 35.4 million sq ft in 2021.



Logistics Service Providers were the most active source of take-up in Q3 2022 accounting for 50% of Grade A take-up. Retailers accounted for 20% of total take-up over the same period.



Grade A availability was 35% higher that the end of 2021, and 33% up on the previous quarter end. The majority of the increase in demand was due to an increase in speculative development. Across GB, our vacancy rate increased from 5.0% at the end of 2021 to 6.8% at the end of Q3 2022. Excluding units speculatively under construction, the vacancy rate increased from 1.0% to 1.8% over the same period.



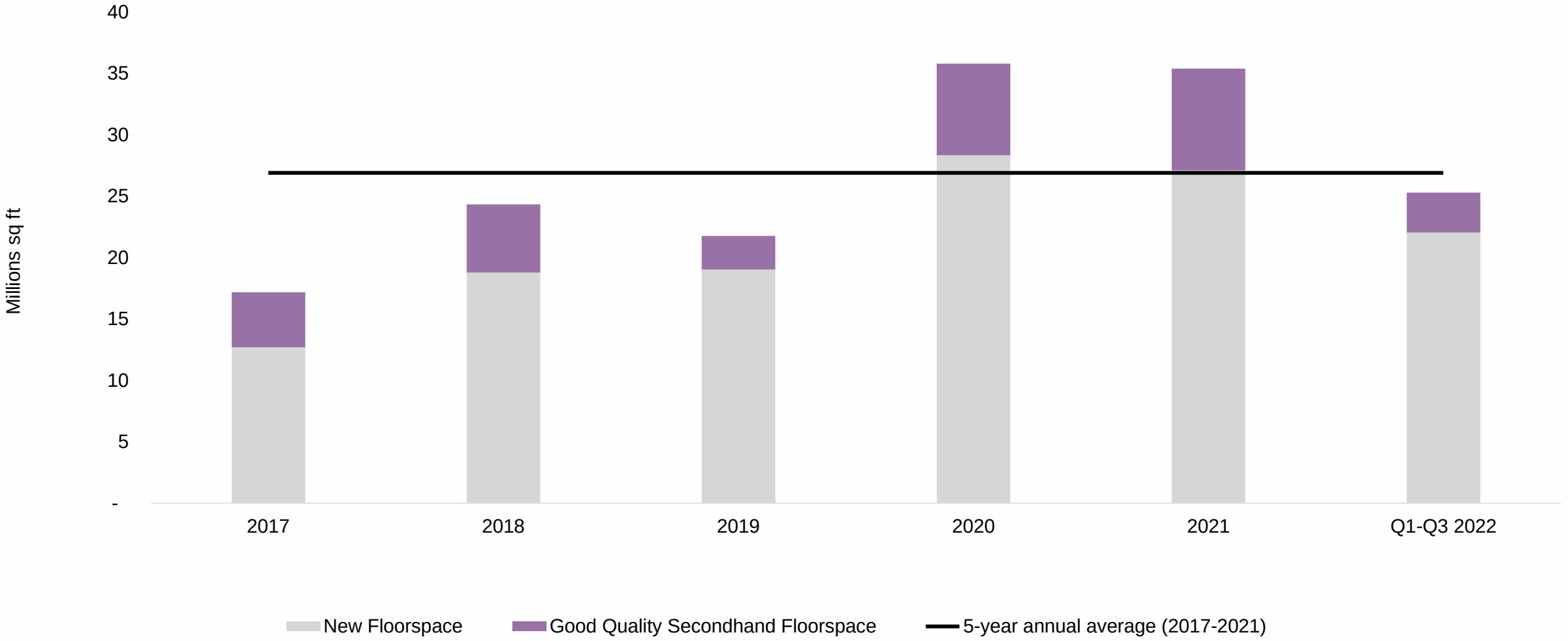
Across GB, **JLL prime headline logistics rents increased** by 11.3% in the 9 months to September 2022 and 16.3% over the 12-month period to Q3 2022.

The **investment market** is undergoing a significant re-pricing due to rising interest rates. At the end of September 2022 prime logistics yields in London, the South East and the major regional markets were 75 bp higher than at the end of Q2 and 100 bp higher than at the end of Q1.

JLL's figures include Grade A (new and good quality secondhand) logistics units of 100,000 sq ft +. Take-up includes new build to suit figures where the transaction has both signed and the site has planning permission for the proposed building. The take-up figures include the total floorspace of units with concrete mezzanine floors.

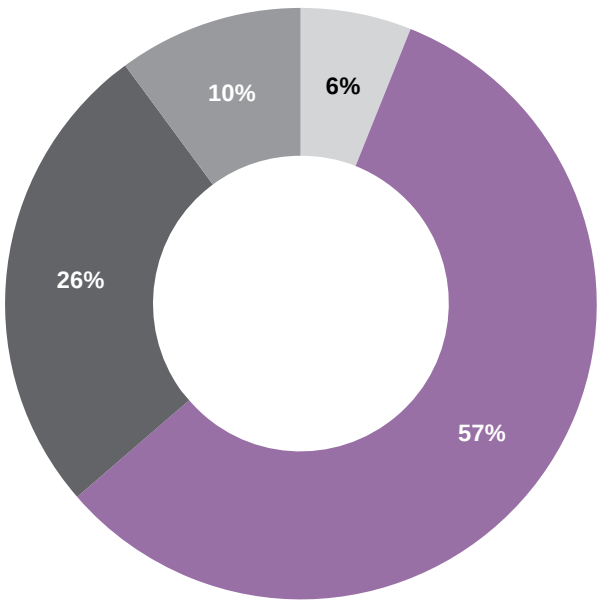
Strong levels of demand continued in Q3 2022

Grade A take-up involving units of 100,000 sq ft +

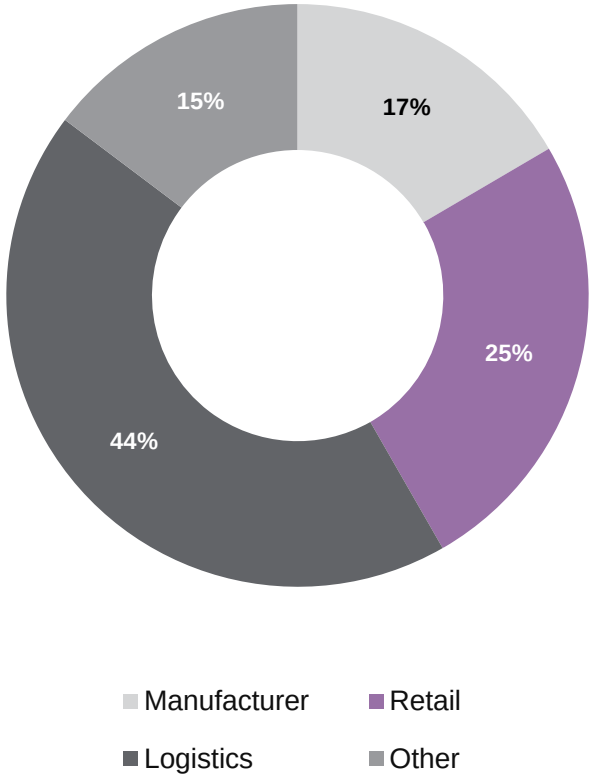


Grade A take-up by sector

Logistics accounted for **44% of take-up** between Q1-Q3 2022 and Retailers accounted for **25%**.



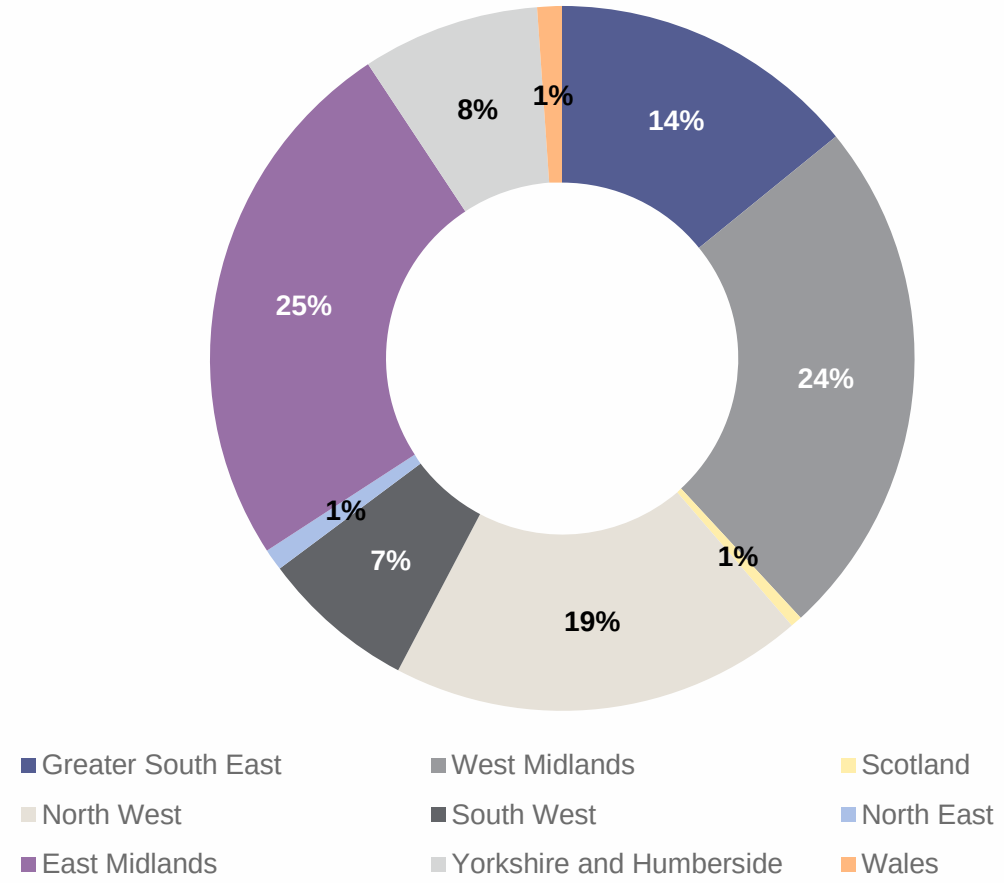
2021



Q1-Q3 2022

Grade A take-up by region

The East Midlands posted the highest proportion of take-up in Q1-Q3 2022 accounting for 25% of the total, followed by the West Midlands at 24%.

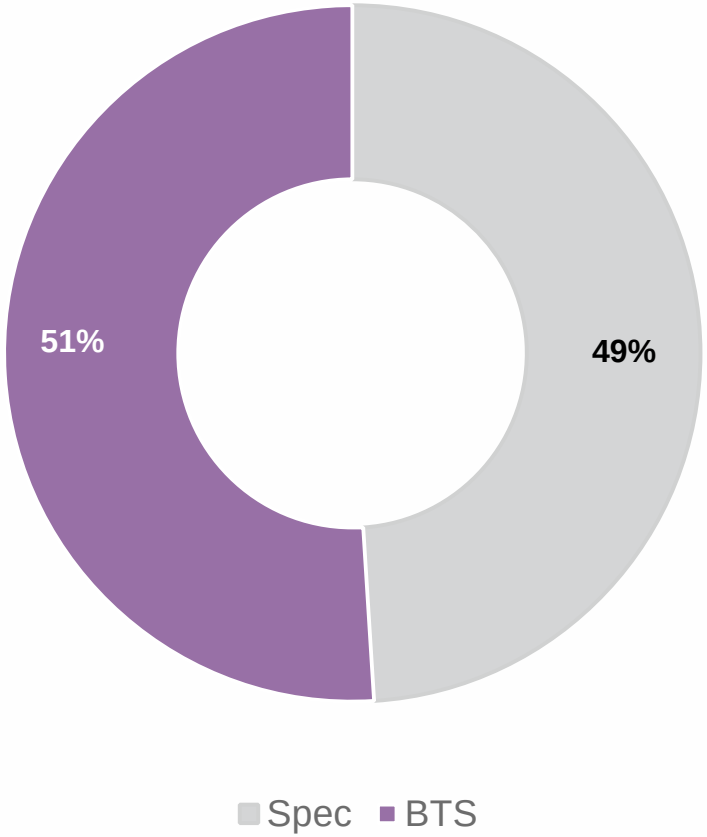


Q1-Q3 2022

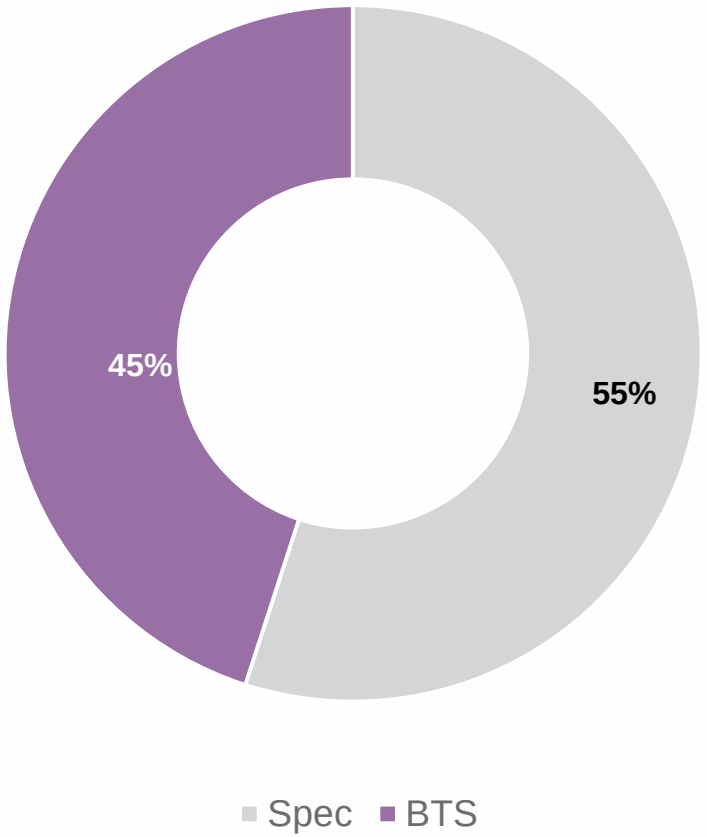
Speculative developments accounted for a greater share of new take-up in Q1-Q3 2022 then BTS buildings

The share of speculatively developed space represented **55%** of the new floorspace transacted in Q1-Q3 2022

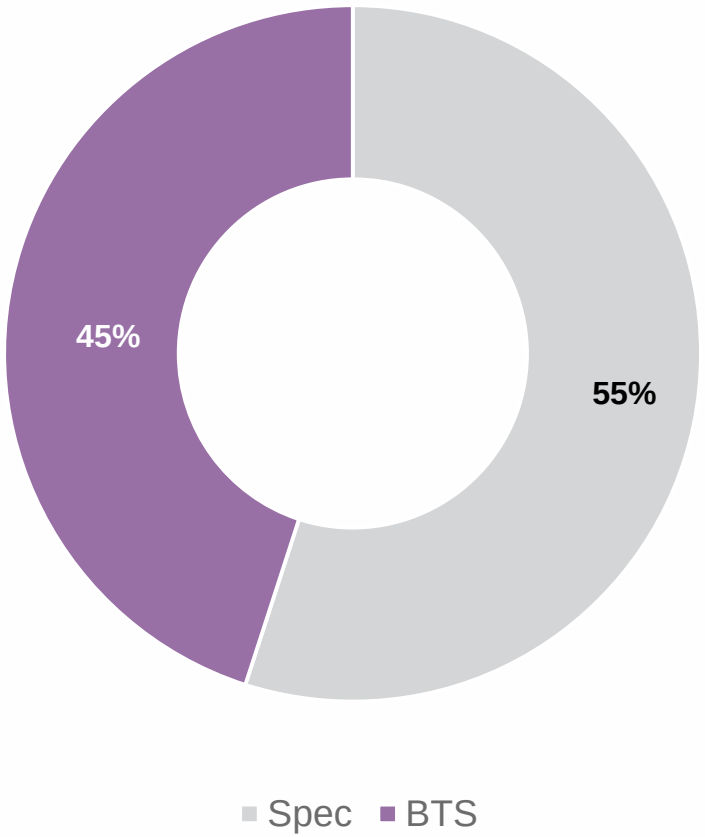
2017-2020



2021

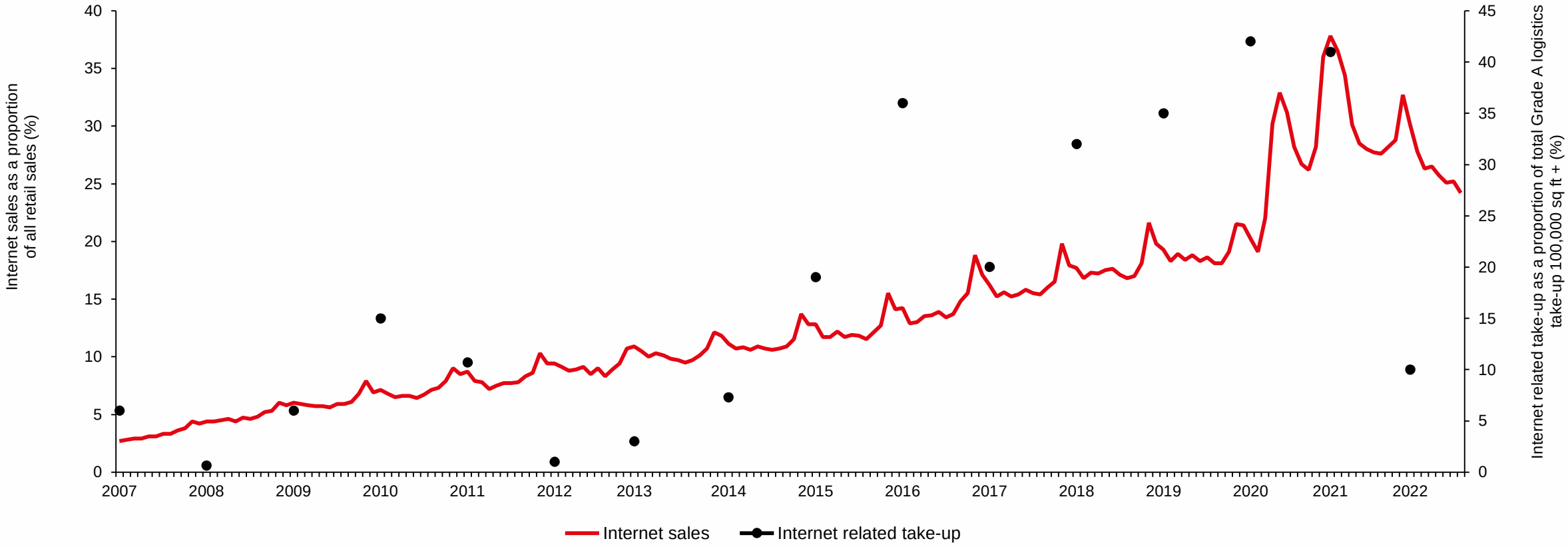


Q1-Q3 2022



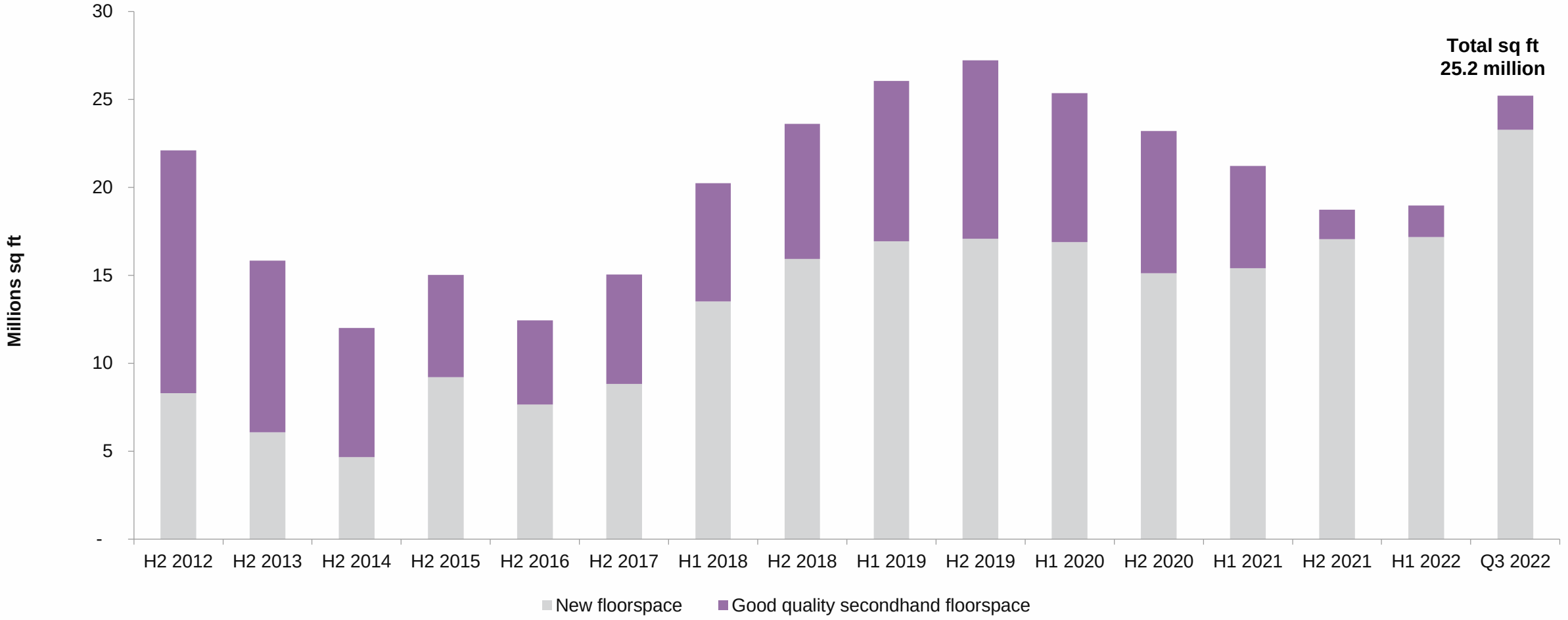
Online sales and internet related take-up

During Q1-Q3 2022 approximately **10%** of all Grade A logistics take-up was for dedicated internet fulfilment



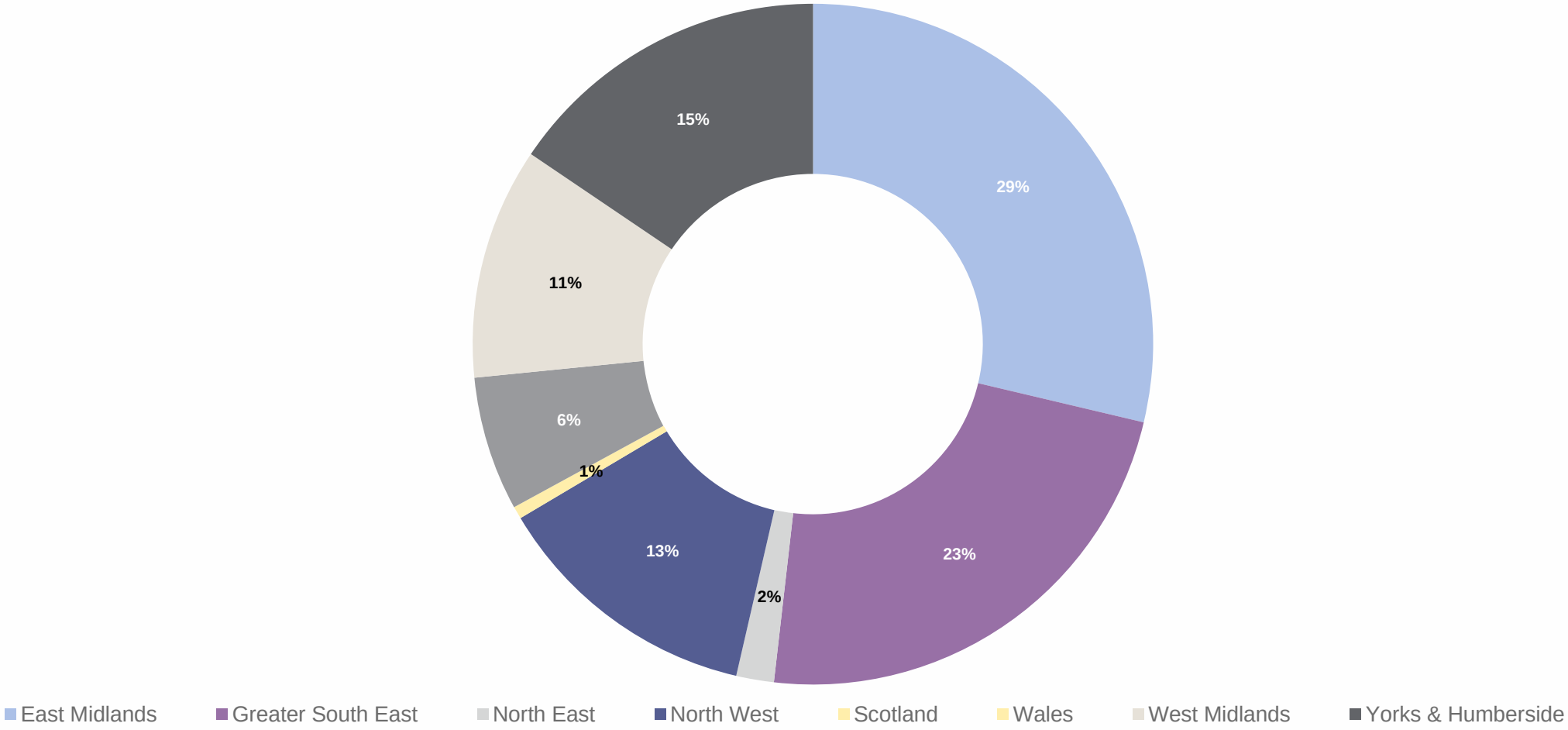
Grade A available supply at the end of Q3 2022

Grade A supply at the end of Q3 2022 was **35%** up on the end of 2021



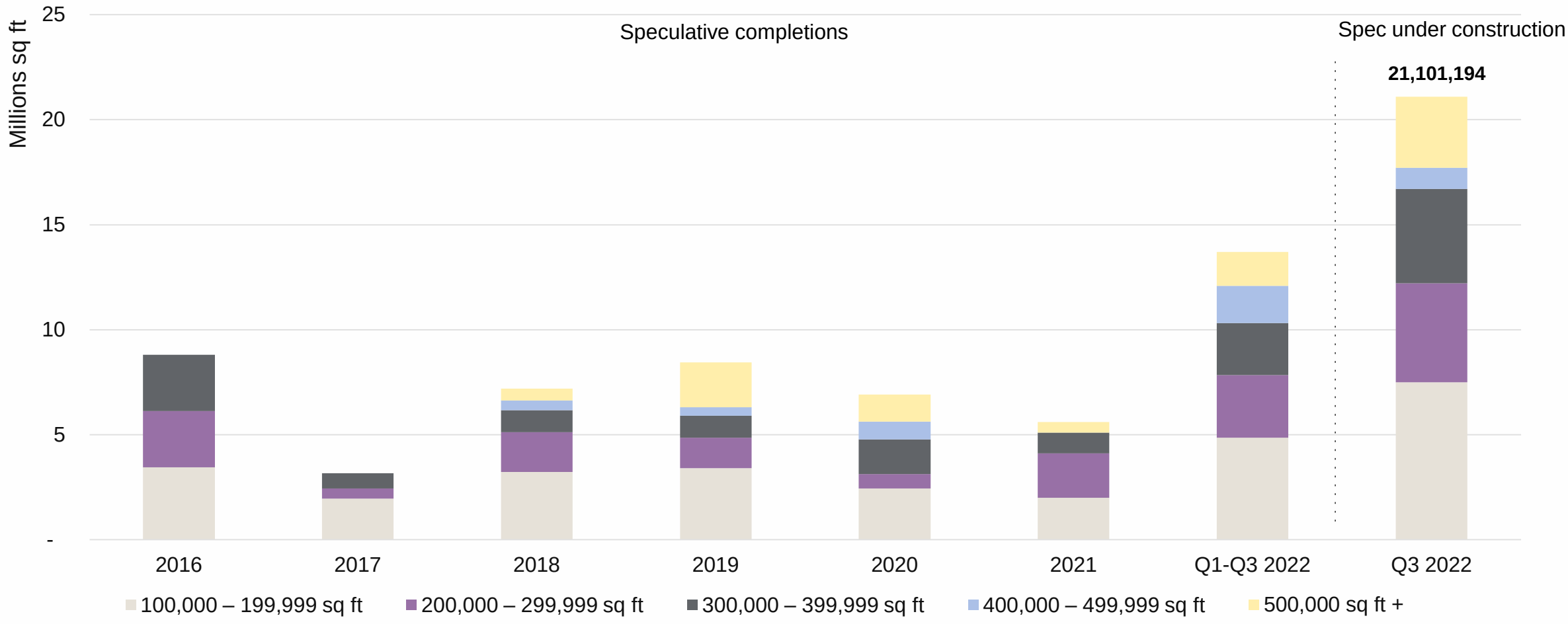
Grade A supply by region

The East Midlands accounted for the highest share of supply at end-September 2022 with **a 29% share** of the GB total.



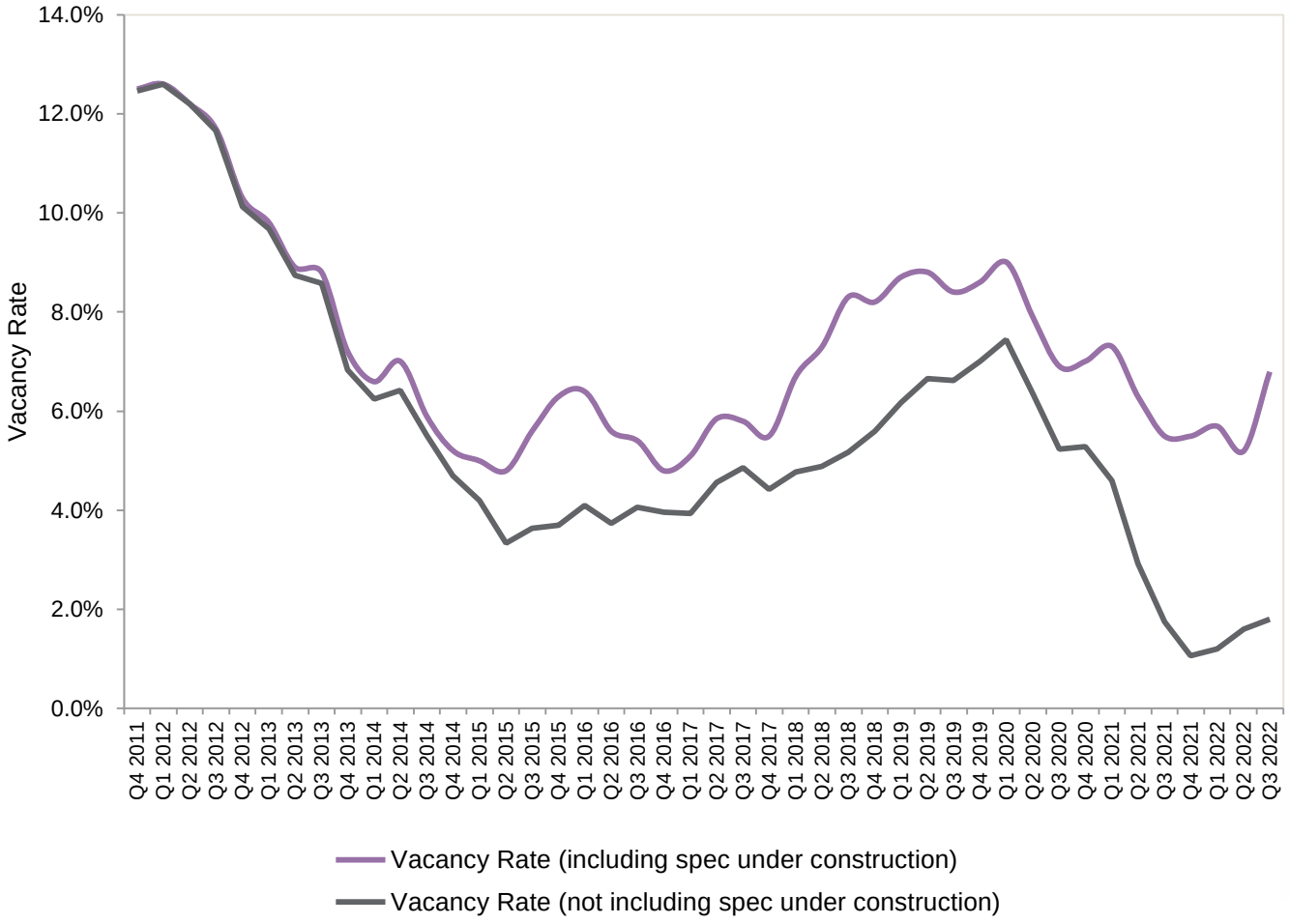
Sizeband split of historic big box speculative completions

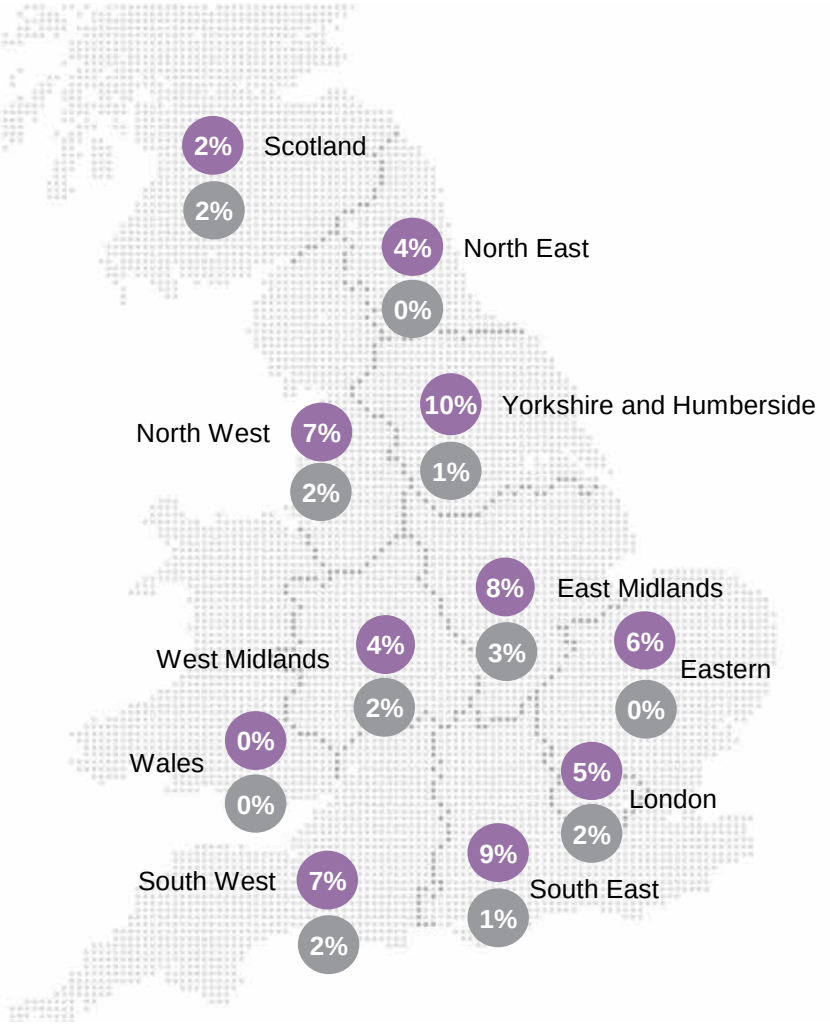
21.1 million sq ft was speculatively under construction at the end of Q3 2022, of which 18.6 million sq ft was available.



Logistics vacancy at the end of Q3 2022

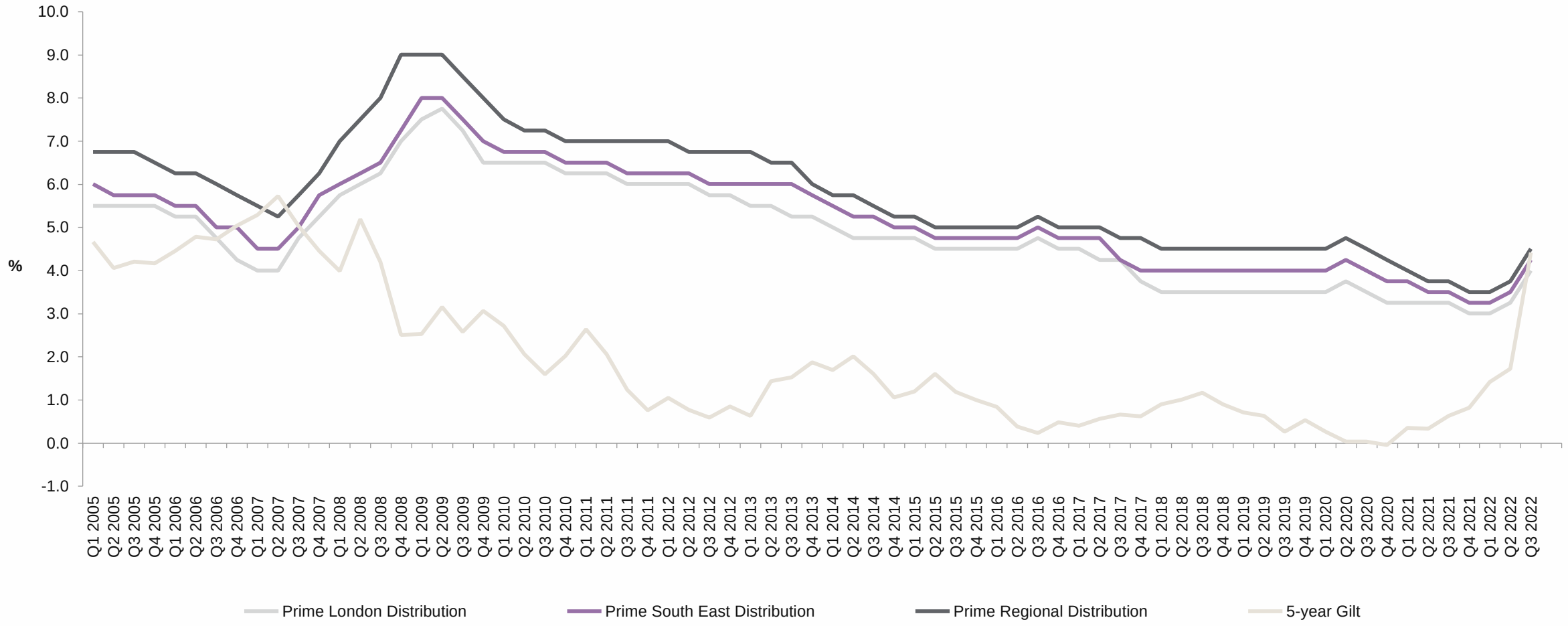
At the end of Q3 2022 the GB logistics vacancy rate stood at **6.8%** including space speculatively under construction and at **1.8%** if space under construction is excluded.





Prime logistics yields Q3 2022

Prime logistics yields*



**Assuming a 15 year income and OMR*

Thank you

Jon Sleeman
Director – Research

Avina Panchasara
Senior Research Analyst

Appendix 3 – Marketing Brochure for Newark Gateway

newark gateway

A1 · A46

Bespoke occupier solutions up to 2 million sq ft for sale/to let

Unique Industrial/Warehouse Development Opportunity

www.newarkgateway.co.uk

Strategic Location

ROAD	Miles	Time
A1	1	3 mins
A46	4	11 mins
Lincoln	21	33 mins
Nottingham	22	40 mins
Mansfield	24	43 mins
M1 J27	28	50 mins
Leicester	36	51 mins
Leeds	77	1hr 29 mins
Birmingham	81	1hr 29 mins
London	123	2hr 27 mins

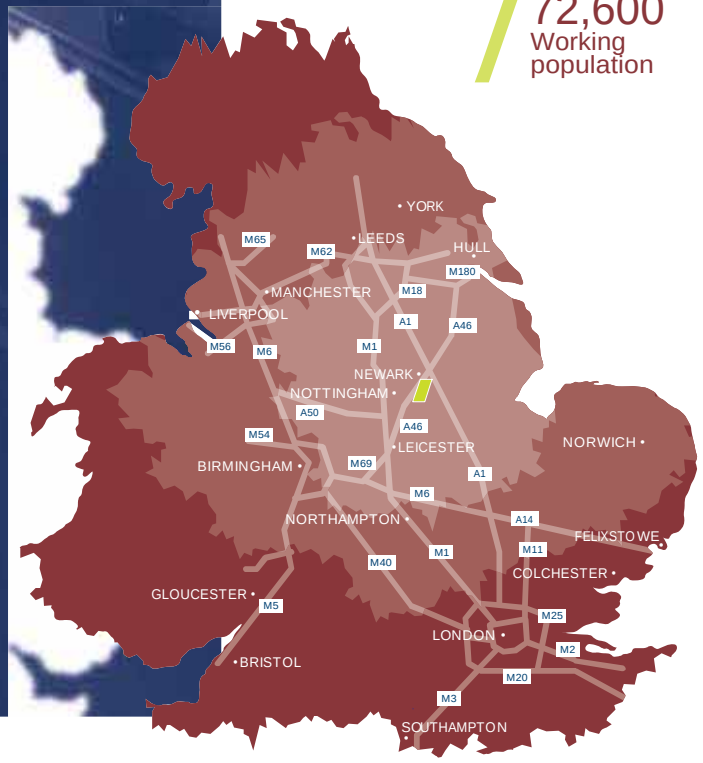
SEAPORTS	Miles	Time
Immingham	59	1hr 18 mins
Hull	62	1hr 22 mins
London Gateway	143	2hrs 22 mins
Felixstowe	143	2hrs 28 mins

INLAND PORTS	Miles	Time
East Midlands Gateway	33	56 mins
DIRFT	61	1hr 8 mins
Widnes	130	2hrs 25 mins

AIRPORTS	Miles	Time
East Midlands Airport	33	56 mins
Robin Hood Airport	41	57 mins
Birmingham Airport	75	1hr 23 mins

PASSENGER RAIL	Time
London King's Cross	1 hour 17 mins

Source: UK Haulier, Google



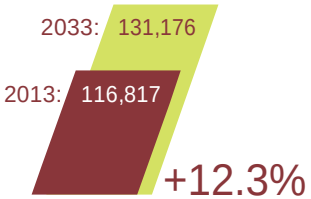
HGV drive times

- 1 Hour
- 2 Hours
- 3 Hours

Flexible Workforce

Newark has an increasing population and competitive labour costs, making it an ideal location for your business.

Average Gross weekly pay



Change in population

72,600 Working population

82% Economically Active

78% UK average

All above data taken from nomisweb.co.uk unless otherwise stated


· Outline consent for B1, B2 & B8 uses
· Bespoke building solutions
· Leasehold & Freehold opportunities
110 acres ideally placed to serve
midland, northern and eastern markets

newark gateway

Newark Gateway occupies a strategic position in the heart of the UK.
It is located just minutes from the A1 and close to the recently upgraded A46 dual carriageway, providing fast and reliable access to major Cities in the region and across the country.

Urban&Civic plc

Urban&Civic strives to be a best in class property company which crafts strategic sites and commercial developments that deliver results for all stakeholders. We believe in doing things right and we define ourselves by the quality of our projects.

A track record of delivery

Urban and Civic's Alconbury Weald development totals 3 million square foot of consented commercial space. The site's combination of scale and flexibility is unique in southern England.

"Our facility here is a large one, and the Campus is not only able to provide the space and power we need, but chemical storage licences and planning permission have all been straightforward, as the partnership behind the Enterprise Zone is hugely supportive."

Andy Williamson, IKO UK Group Managing Director and tenant at Alconbury Weald

up to 2,000,000 sq ft industrial & log

UNIT 1	SQ M	SQ FT
Warehouse	15,902	171,173
Office (2 storey)	837	9,009
Gatehouse	28	301
Total area	16,767	180,483
HGV parking	76	
Car parking	171	
Dock levellers	17	
Level access	2	

UNIT 2	SQ M	SQ FT
Warehouse	13,243	142,544
Office (2 storey)	697	7,502
Gatehouse	28	301
Total area	13,968	150,347
HGV parking	54	
Car parking	133	
Dock levellers	14	
Level access	2	

UNIT 3	SQ M	SQ FT
Warehouse	10,593	114,025
Office (2 storey)	557	6,001
Gatehouse	28	301
Total area	11,178	120,327
HGV parking	43	
Car parking	126	
Dock levellers	11	
Level access	2	

UNITS 4A-4E	SQ M	SQ FT
4A Total area	2,666	28,697
4B Total area	2,666	28,697
4C Total area	3,731	40,160
4D Total area	2,666	28,697
4E Total area	2,666	28,697

UNITS 5A-5C	SQ M	SQ FT
5A Total area	3,731	40,160
5B Total area	3,731	40,160
5C Total area	3,731	40,160

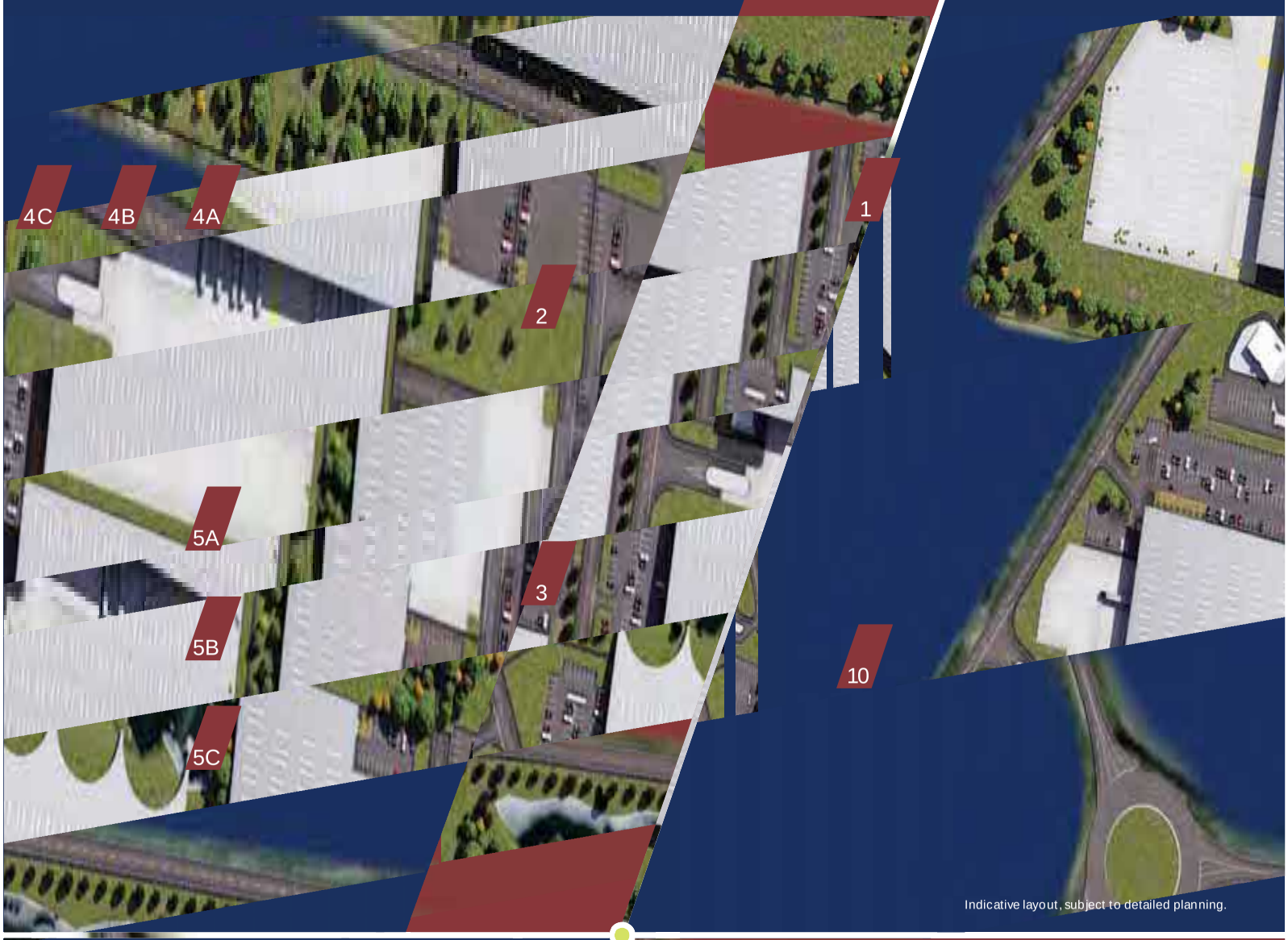
Superb standard specification

Warehouse

- FM2 category floor
- 50 kN sq m floor loading
- Clear height up to 15m

Office

- Two-storey offices
- Mechanically ventilated system
- Suspended ceilings
- Raised access floors



Indicative layout, subject to detailed planning.

istics opportunity

Indicative masterplan — for alternative site layouts, go to
www.newarkgateway.co.uk

UNIT 6	SQ M	SQ FT
Warehouse	4,608	49,600
Office (2 storey)	246	2,648
Total area	4,854	52,248
HGV parking	12	
Car parking	46	
Dock levellers	5	
Level access	1	

UNIT 7	SQ M	SQ FT
Warehouse	5,376	57,867
Office (2 storey)	286	3,078
Total area	5,662	60,945
HGV parking	12	
Car parking	56	
Dock levellers	6	
Level access	1	

UNIT 8	SQ M	SQ FT
Warehouse	44,135	475,064
Office (2 storey)	2,323	25,003
Gatehouse	28	301
Total area	46,486	500,368
HGV parking	172	
Car parking	416	
Dock levellers	46	
Level access	6	

UNIT 9	SQ M	SQ FT
Warehouse	55,623	598,722
Office (2 storey)	2,927	31,512
Gatehouse	28	301
Total area	58,578	630,535
HGV parking	257	
Car parking	442	
Dock levellers	58	
Level access	6	

UNIT 10	SQ M	SQ FT
Drive-Thru restaurant	204	2,196
Car parking	28	

Total site area
183,285 sq m
1,972,877 sq ft

External

- 50m deep service yards
- Secure fenced site
- Security lighting – office car park and service yard
- Covered cycle shelter

Sustainability

- Target EPC rating of 'A'
- Minimum BREEAM 'Very Good' (2014)
- Rooftop solar PV to deliver 10% of each buildings regulated energy use

Power

- Suitable for distribution or industrial applications

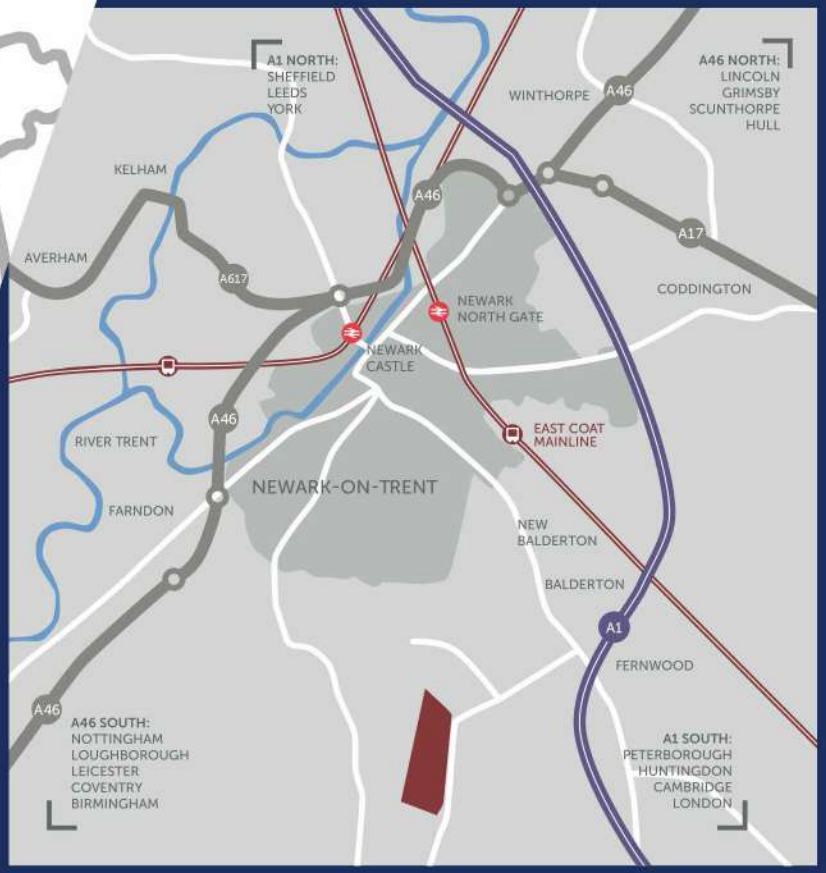
Planning

- Outline planning consent for B1, B2 & B8 industrial and distribution uses.

Terms

- Buildings will be available on either a freehold or leasehold basis, subject to terms, alternatively freehold disposals of parcels of land will be considered.

newarkgateway.co.uk



Sat Nav: NG24 3JJ

For further information contact:

savills.co.uk
[redacted]

Charlie Spicer
[redacted]
Richard Sullivan
[redacted]

MWRE
WWW.MWRE.CO.UK
[redacted]

Adam McGuinness
[redacted]
Nick Waddington
[redacted]

Urban&Civic plc

Appendix 4 – Marketing Brochure for Newark Logistics Park


A development by
EQUATION PROPERTIES
BentallGreenOak
NEWARK
LOGISTICS PARK
NG24 2ER
TO LET
TWO HIGH QUALITY INDUSTRIAL/DISTRIBUTION
WAREHOUSES 520,760 & 166,350 SQ FT
AVAILABLE FROM Q4 2023
Newark Logistics Park,
Brunel Drive, Newark-on-Trent,
Nottinghamshire, NG24 2ER

NEWARK LOGISTICS PARK IS A NEW INDUSTRIAL/DISTRIBUTION DEVELOPMENT LOCATED IN NEWARK, THE HEART OF THE EAST MIDLANDS. STRATEGICALLY SITUATED ON THE A46/A1 INTERCHANGE, THE SCHEME OFFERS UK-WIDE CONNECTIVITY.

The site extends to 37 acres and consists of two high quality warehouses of 520,760 & 166,350 SQ FT, available from Q4 2023. Newark Logistics Park is an ideal development for a broad range of businesses seeking to streamline their business activities in the East Midlands and to the rest of the UK.

THE OFFER

Two high quality industrial/ distribution warehouses 520,760 & 166,350 SQ FT

Available from Q4 2023

24hr Access.

SUSTAINABLE

BREEAM ‘Excellent’

EPC A rating.

PRIME LOCATION

Prominent location 1 mile from the A46/A1 intersection.

WORKFORCE

Excellent local labour pool of 113,500 economically active residents within a 30 minute drive.

(Source: Nomis)

ESTATE

Enhanced quality private estate with landscaped environment.

FUTURE PROOF

EV charging points and a range of sustainable features to future proof occupiers’ ongoing requirements and mitigate occupational costs.

NLP MASTERPLAN

TOTAL AREA (GIA)	SQ FT
	687,110

UNIT 1

	SQ FT
WAREHOUSE AREA	500,000
OFFICE (INCL. GF CORE)	15,460
TRANSPORT OFFICES	5,000
GATEHOUSE	300
TOTAL AREA (GIA)	520,760

HAUNCH HEIGHT	18 M
LEVEL ACCESS LOADING DOORS	8
DOCK LOADING DOCKS	72
CAR PARKING SPACES	450
HGV PARKING SPACES	101
CYCLE PARKING SPACES	148
MOTORCYCLE PARKING SPACES	46
EV CHARGING POINTS (ACTIVE)	20
EV CHARGING POINTS (PASSIVE)	90
YARD DEPTH	50M
POWER SUPPLY	1.7MVA

UNIT 2

	SQ FT
WAREHOUSE AREA	157,750
OFFICE (INCL. GF CORE)	8,300
GATEHOUSE	300
TOTAL AREA (GIA)	166,350

HAUNCH HEIGHT	12.5M
LEVEL ACCESS LOADING DOORS	2
DOCK LOADING DOCKS	16
CAR PARKING SPACES	155
HGV PARKING SPACES	27
CYCLE PARKING SPACES	48
MOTORCYCLE PARKING SPACES	16
EV CHARGING POINTS (ACTIVE)	6
EV CHARGING POINTS (PASSIVE)	31
YARD DEPTH	50M
POWER SUPPLY	600KVA

WAREHOUSE

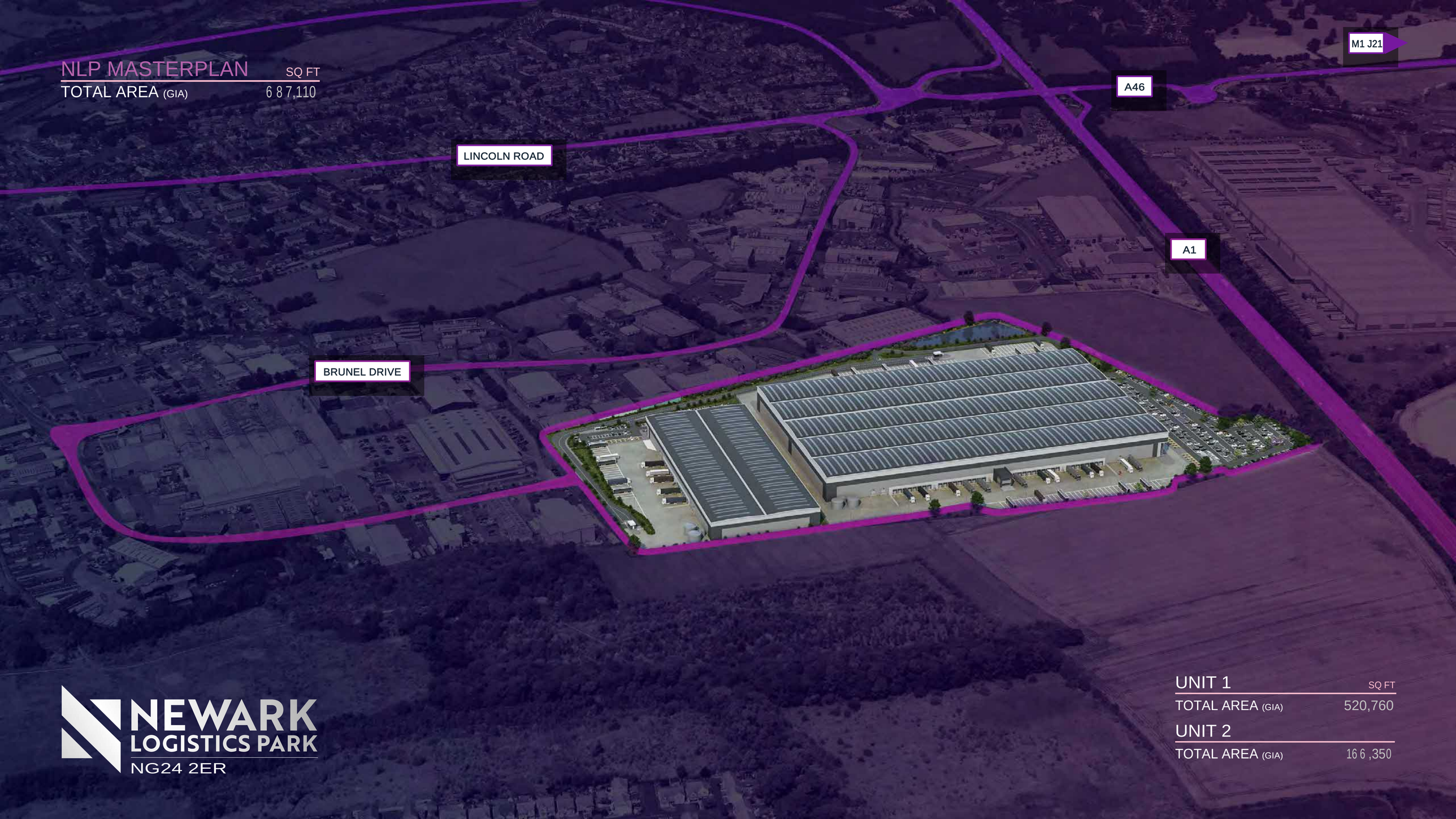
- 50 kN/m2 Floor Loading
- EPC A Rating
- BREEAM 'Excellent' Rating
- 15% Roof Lights to Warehouse

EXTERNAL

- 50M Yard Depth
- EV Parking Bays
- Secured Entrances Independent Gates
- Perimeter Paladin Estate Fencing

OFFICES

- LED Lighting with Smart Control
- Grade A Open Plan Office
- VRF Heating and Comfort Cooling
- Double Height Glazed HQ Reception



NLP MASTERPLAN

	SQ FT
TOTAL AREA (GIA)	687,110

UNIT 1

	SQ FT
TOTAL AREA (GIA)	520,760

UNIT 2

TOTAL AREA (GIA)	166,350

NEWARK LOGISTICS PARK

NG24 2ER

STRATEGIC

Newark Logistics Park is strategically located in the heart of the East Midlands. The site is positioned just 1 mile away from the A46/A1 intersection which offers UK-wide connectivity and a direct fast train line to London in 1 hr 19 min.

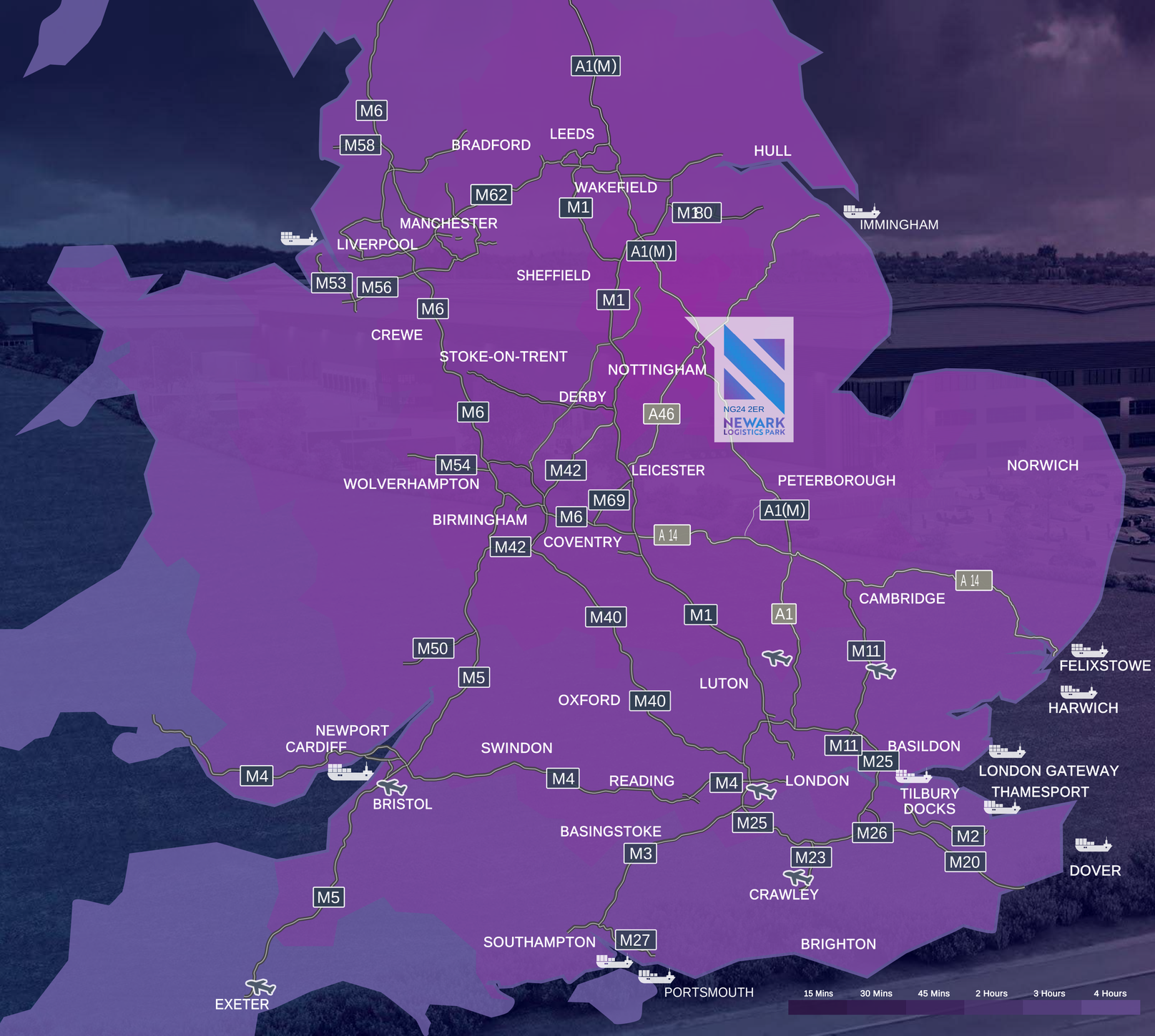
The A1 provides direct access to the South and East linking to the M11, M1, M18 and M62 motorways.

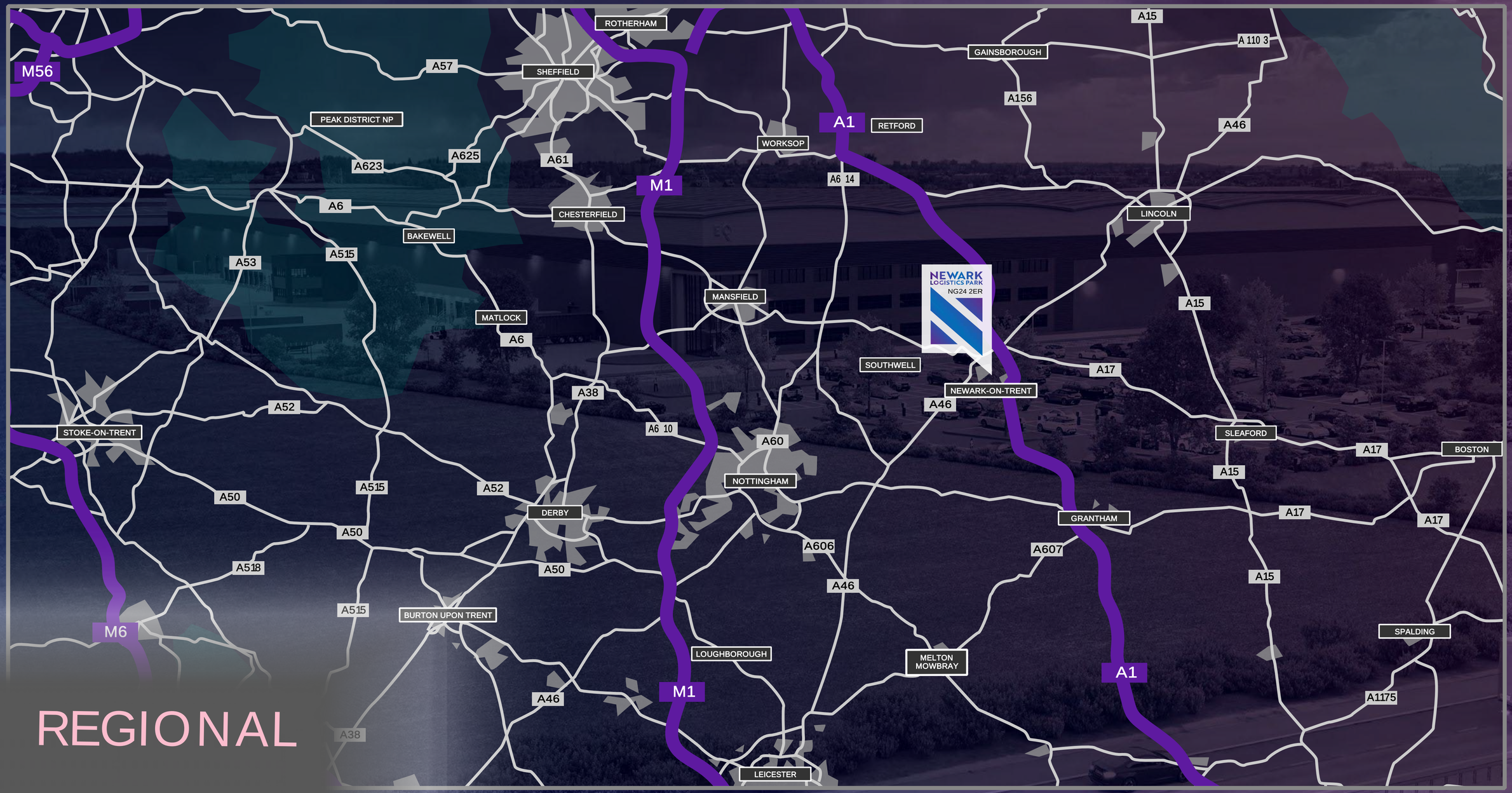
AIRPORTS	DISTANCE	JOURNEY
EAST MIDLANDS	35 MILES	50 MINS
BIRMINGHAM	76 MILES	1 HR 21 MINS
LONDON LUTON	109 MILES	1 HR 52 MINS
HEATHROW	138 MILES	2 HRS 19 MINS
LONDON CITY AIRPORT	136 MILES	2 HRS 22 MINS
GATWICK AIRPORT	173 MILES	2 HRS 51 MINS

PORTS	DISTANCE	JOURNEY
LONDON GATEWAY	143 MILES	2 HRS 28 MINS
FELIXSTOWE	150 MILES	2 HRS 32 MINS
SOUTHAMPTON	181MILES	3 HRS 17 MINS

PLACES	DISTANCE	JOURNEY
A46/A1	1 MILE	3 MINS
NEWARK CITY CENTRE	1.5 MILES	6 MINS
LONDON M25	122 MILES	2 HRS 10 MINS
BIRMINGHAM	83 MILES	1 HOUR 26 MINS

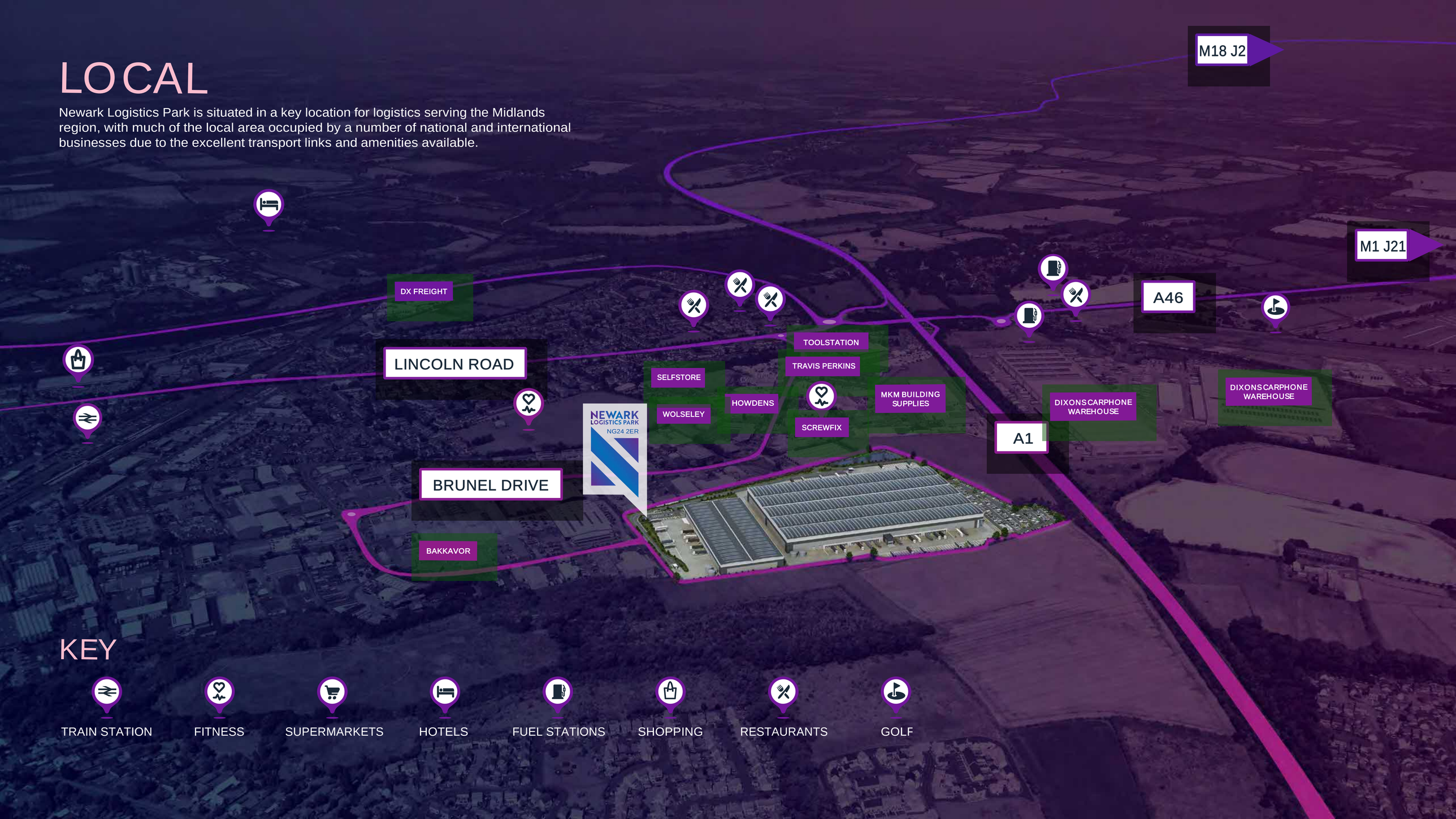
RAIL FREIGHT	DISTANCE	JOURNEY
DIRFT	63 MILES	1 HR 7 MINS




NEWARK
LOGISTICS PARK
NG24 2ER
ROTHERHAM
SHEFFIELD
GAINSBOROUGH
A15
A 110 3
M56
A57
A156
A46
PEAK DISTRICT NP
A1
RETFORD
WORKSOP
A623
A625
A61
A6 14
M1
A6
CHESTERFIELD
LINCOLN
BAKEWELL
A53
A515
MANSFIELD
A15
MATLOCK
A6
SOUTHWELL
A17
A38
NEWARK-ON-TRENT
A52
A46
STOKE-ON-TRENT
A6 10
A60
SLEAFORD
BOSTON
A17
A15
A50
A515
A52
NOTTINGHAM
DERBY
GRANTHAM
A17
A17
A50
A606
A607
A518
A50
A46
A15
A515
BURTON UPON TRENT
M6
SPALDING
LOUGHBOROUGH
MELTON
MOWBRAY
A1
M1
A46
A1175
A38
LEICESTER
REGIONAL

LOCAL

Newark Logistics Park is situated in a key location for logistics serving the Midlands region, with much of the local area occupied by a number of national and international businesses due to the excellent transport links and amenities available.



KEY

TRAIN STATION · FITNESS · SUPERMARKETS · HOTELS · FUEL STATIONS · SHOPPING · RESTAURANTS · GOLF

SUSTAINABILITY

BREEAM UK NEW CONSTRUCTION 2018 (SHELL & CORE)

‘Excellent’ Rating

ENERGY PERFORMANCE CERTIFICATE

A Rating for excellent energy performance.

NATURAL LIGHT

Optimised use of natural light with 15% roof lights and excellent office visibility.

RENEWABLE TECHNOLOGIES

Solar PVs and air source heat pumps provide reduced energy consumption and CO2 emissions.

RESPONSIBLE SOURCING

Assured construction materials with low environmental, economic and social impact.

ELECTRIC VEHICLE CHARGING

24 (active) 150 (passive) Charging points provided with provision for to future-proof occupier fleet requirements.

WATER REGULATION TECHNOLOGIES

Efficient sanitary-ware with low flow rates to reduce water consumption.

SUSTAINABLE MATERIALS

Reduce energy consumption and environmental impact over the life cycle of the building.

BICYCLE SPACES

upto 203 spaces in covered shelters encourages environmental travel.

ENHANCED CLADDING

Delivering superior energy performance to reduce running costs.

ENERGY METERING TECHNOLOGY

Allows occupiers to pro-actively manage their energy consumption.

LED LIGHTING

Enables 75% less energy consumption and 25 times more durability than incandescent lighting.

DEMOGRAPHICS*

119 ,231

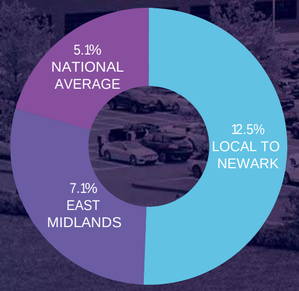
NLP has an economically active workforce within a 30m Drive

50 0 ,114

NLP has an economically active workforce within a 45m Drive

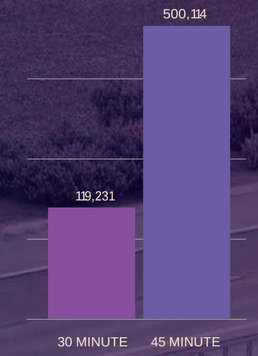
* SOURCE CACI / ONS

EMPLOYEES WORKING IN STORAGE & TRANSPORT



WEEKLY EMPLOYEE WAGE

RESIDENT POLULATION DRIVE TIME



SKILLED

NLP benefits from a large economically active labour pool at 119 ,231 individuals within a 30 minute drive, and 50 0 ,114 within a 45 minute drive. Of which, 12.5% are already employed within Transport & Storage roles which gives occupiers access to a sizeable workforce with appropriate skills needed for their operations. Weekly wages of this group is lower than the national and regional averages , allowing businesses to remain competitive with their human resource expenditure.

PROVEN

View Portfolio

Equation Properties continue to provide quality logistics solutions throughout the UK.

NEWARK LOGISTICS PARK
NG24 2ER

Newark Logistics Park,
Brunel Drive, Newark-on-Trent,
Nottinghamshire, NG24 2ER

CONTACT THE JOINT AGENTS FOR MORE INFORMATION

CUSHMAN & WAKEFIELD

CAMERON MITCHELL
[redacted]

FRANCO CAPELLA
[redacted]

JLL

jll.co.uk/property

CARL DURRANT
[redacted]

ED COLE
[redacted]

GEMMA CONSTANTINOU
[redacted]

LOCATION

///

what3words

UNLOCKING.TACTICAL.TITLES

A DEVELOPMENT BY

BentallGreenOak

BentallGreenOak is a global real estate investment manager operating throughout Europe, the United States, Canada and Asia. In Europe, BentallGreenOak is a highly experienced logistics specialist, having acquired and developed over 66 million sq ft of logistics warehousing in 200 assets throughout Europe since 2015. The majority of this space being leased to leading institutional quality tenants such as Amazon, DHL, Lidl, Aldi and Sainsbury's.

EQUATION PROPERTIES

Equation Properties is an established and experienced commercial property development company with the required skill and expertise to deliver industrial developments. With a proven track record in small, medium and large industrial / distribution schemes over many years, together with a team of professional consultants whom have worked on numerous projects, Equation Properties employ a dynamic approach to development.

NEWARKLOGISTICSPARK.CO.UK

45 Church Street

Birmingham
B3 2RT

Peter Leaver
Director
[redacted]

About JLL

JLL (NYSE: JLL) is a leading professional services firm that specializes in real estate and investment management. JLL shapes the future of real estate for a better world by using the most advanced technology to create rewarding opportunities, amazing spaces and sustainable real estate solutions for our clients, our people and our communities. JLL is a Fortune 500 company with annual revenue of $16.6 billion, operations in over 80 countries and a global workforce of operations in over 80 countries and a global workforce of more than 91,000 as of December 31, 2020. JLL is the brand name, and a registered trademark, of Jones Lang LaSalle Incorporated. For further information, visit jll.com.

NEWARK & SHERWOOD DISTRICT COUNCIL

Notice of Decision

Delta Planning - Mrs Karin Hartley
Cornwall Buildings
45 Newhall Street
Birmingham
B3 3QR

Town and Country Planning Act 1990

The Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended)

Application for:	Reserved Matters Major
Application No:	22/02427/RMAM
Applicant:	Tritax Acquisition 39 Limited
Agent:	Delta Planning - Mrs Karin Hartley
Proposal:	Reserved matters application pursuant to application 20/01452/OUTM Erection of one distribution building (Use Class B8) together with ancillary offices, plot access, car parking and landscaping.
Site Address:	Land Off A17 Coddington Nottinghamshire

Newark and Sherwood District Council as Local Planning Authority in pursuance of their powers under the said legislation Grant Reserved Matters Major for the development described in the above application, subject to the following conditions.

Conditions:

01

The development hereby permitted shall not be carried out except in complete accordance with the following approved plans and documents references:

121002 Rev P11 Unit 1 Proposed Site Plan
12 Rev E Landscaping Cross Sections
11F Landscape Concept Plan (implementation linked to condition 14 of Outline consent 20/01452/OUTM)
16 Diamond Tree Pit in Car Park Construction
101301 P111 Elevations
101105 P1 Roof Plan
101102 P111 Office Plans
100101 P111 Warehouse Floor Plan
310101 P01 Gatehouse Elevations

210101 Rev P01 Gatehouse GA Plans and Sections
Biodiversity/Landscape Environmental Management Plan Rev B December 2022 (implementation linked to condition 17 of outline consent 20/01452/OUTM)

Reason:

So as to define this permission.

02

Notwithstanding the submitted details, no development above slab level shall be carried out until details of the external materials have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reason:

In the interests of visual amenity.

03

No raw materials, equipment, finished products or waste materials shall be stored outside buildings other than in accordance with details to be approved in writing by the Local Planning Authority prior to the commencement of such storage. Thereafter any external storage shall be located in accordance with the approved details.

Reason:

In the interests of residential and visual amenity.

04

No development shall be commenced until details of the existing and proposed ground and finished floor levels of the site and approved buildings have been submitted on a single plan/or document and approved in writing by the Local Planning Authority. The development shall be carried out thereafter in accordance with the approved details.

Reason:

In the interests of visual amenity.

05

Prior to the installation of any external lighting on the site, an updated external lighting scheme in general accordance with Drawing No. 5460-CBC-00-XX-DR-E-63001 Rev P02 contained in Appendix 9 of the External Impact Lighting Assessment P03 (September 2022), shall be submitted to and approved in writing by the Local Planning Authority. The external lighting shall thereafter be installed in accordance with the approved lighting scheme.

Reason:

In the interests of biodiversity, residential and visual amenity.

06

No building on site shall be occupied until details of bat boxes (including their design and location) in accordance with the recommendations set out in the Biodiversity/Landscape Environmental Management Plan Rev B December 2022 have been submitted to and approved in writing by the Local Planning Authority. The bat boxes shall then be installed, prior to occupation, in accordance with the approved details and retained thereafter for the lifetime of the development.

Reason:

In the interests of maintain and enhancing biodiversity.

07

Prior to the installation of any of the features identified below, full details of their design and location shall be submitted to and approved in writing by the Local Planning Authority.

- external accretions;
- structures or above ground plant including substation(s);
- totem sign;
- sprinkler tanks;
- enclosures; and
- any equipment proposed to be installed as recommended in the Energy and Sustainability Statement Rev 002 14/11/22.

The features specifically recommended in the Energy and Sustainability Statement Rev 002 14/11/22, shall then be installed on site prior to first occupation of the building(s) and retained for the lifetime of the development, in accordance with the approved details. Any other features shall be installed in accordance with the approved details.

Reason:

In the interests of visual amenity and climate change.

Note to Applicant

01

The applicant is advised that all planning permissions granted on or after the 1st December 2011 may be subject to the Community Infrastructure Levy (CIL). Full details of CIL are available on the Council's website at www.newark-sherwooddc.gov.uk/cil/

The proposed development has been assessed and it is the Council's view that CIL is not payable on the development hereby approved as the development type proposed is zero rated in this location.

02

This application has been the subject of discussions during the application process to ensure that the proposal is acceptable. The District Planning Authority has accordingly worked positively and pro-actively, seeking solutions to problems arising in coming to its decision. This is fully in accordance with Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended).

03

It is recommended that early discussions are held with the RoW team at NCC (Via) on any impact a development might have on a right of way (surface, width, location etc) or potential change to the route, before the development commences. Contact countrysideaccess@nottscc.gov.uk.

The proposed development requires a public right of way to be diverted. The granting of planning permission does not permit the obstruction of the public right of way. A separate statutory approval for the stopping up or diversion order will be required under the provisions of the Highways Act 1980 or the Town and Country Planning Act 1990 or any other statutory provision

The safety of the public using the path should be observed at all times. A Temporary Traffic Regulation Order (TRO) to prevent or restrict access of the PROW may be granted to facilitate public safety during the construction phase subject to certain conditions. Further information and costs may be obtained by contacting the Rights of Way section countryside.access@nottscc.gov.uk. The applicant should be made aware that at least 5 weeks' notice is required to process the closure and an alternative route on should be provided if possible. A TRO application will only be granted on a PROW to be temporary closed and diverted as a result of the development once the application to stop up or divert the PROW under the TCPA 1990 has been accepted by the LPA.

04

The Board maintained Winthorpe Airfield Drain, an open and culverted watercourse, exists to the North of the site and to which BYELAWS and the LAND DRAINAGE ACT 1991 applies. The Board's consent is required to erect any building or structure (including walls and fences), whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 9 metres of the top edge of any Board maintained watercourse or the edge of any Board maintained culvert. The Board's consent is required for any works, whether temporary or permanent, in, over or under, any Board maintained watercourse or culvert. The erection or alteration of any mill dam, weir or other like obstruction to the flow, or erection or alteration of any culvert, whether temporary or permanent, within the channel of a riparian watercourse will require the Board's prior written consent. The Board's Planning and Byelaw Policy, Advice Notes and Application form is available on the website - www.wmc-idbs.org.uk/TVIDB The Board's consent is required for any works that increase the flow or volume of water to any watercourse or culvert within the Board's district (other than directly to a main river for which the consent of the Environment Agency will be required). The Board's consent is required irrespective of any permission gained under the Town and Country Planning Act 1990. The Board's consent will only be granted where proposals are not detrimental to the flow or stability of the watercourse/culvert or the Board's machinery access to the watercourse/culvert which is required for annual maintenance, periodic improvement and emergency works. The applicant should therefore note that the proposals described within this planning application may need to be altered to comply with the Board's requirements if the Board's consent is refused. The applicant is advised that they are likely to have a riparian responsibility to maintain the proper flow of water in any riparian watercourse which borders or flows through land owned or occupied by them.

A copy of the decision notice and the officer/committee report are available to view on the Council's website.

Authorised Officer on behalf of Planning Development, Newark and Sherwood District Council

Date: 17 March 2023

Note: Attention is drawn to the attached notes.

Important note:

This permission refers only to that required under the town and country planning acts and does not include any consent or approval under any other enactment, byelaw, order or regulation, including the passing of plans for the purpose of the building regulations which requires additional approval and a separate application must be submitted.

Approval of details (Reserved Matters): Applicants who receive an approval of details, known as "reserved matters", under previous outline permission are reminded of the requirements as to commencement of the development within the time specified in the conditions attached to the outline permission and to ensure that any other conditions attached to that outline permission are complied with.

Discharge of Conditions: Please note the Discharge of Condition incurs a nationally set fee and the service normally has 8 weeks to respond to each request from date of receipt. Further details are available on our website at: https://www.newark-sherwooddc.gov.uk/planningdecisions/

Material samples: Physical samples of materials for applications should not be submitted to the Council. Photographs, brochures/weblinks and detailed product specifications should provide sufficient detail for assessment by officers. If an actual sample is needed, your case officer will contact you to arrange how they wish to view it.

Appeals to the Department for Levelling Up, Housing and Communities: If you disagree with the decision of the Local Planning Authority to grant it subject to conditions, then you can appeal to the Planning Inspectorate. It is important to note that there are different time periods in which you can appeal from the date of this notice. Please note, if you seek an inquiry you are asked to give the Planning Inspectorate and local planning authority at least 10 days' notice that you intend to submit an inquiry appeal. Further information is available on the Planning Inspectorates website at www.gov.uk/appeal-planning-inspectorate or contact their customer support team by telephone 0303 444 5000 or email enquiries@planninginspectorate.gov.uk

Minor Amendments (not applicable to Listed Building Consent): If you wish to make alterations to a scheme after it has been granted planning approval, some minor changes to approved plans can be dealt with under an amended plan procedure. If this is an option you wish to pursue, the relevant application forms entitled "Application for a non-material amendment following a grant of planning permission" should be completed and returned to us along with scaled plans showing the proposed amendments and a fee. You can submit (and view guidance) your applications online or alternatively, please telephone our Customer Services on 01636 650000 who can arrange for a set to be posted to you.

We will in most cases accept the following as minor amendments to previously approved plans:

- Reduction in the volume/size of the building/extension
- Reduction in the height of the building/extension
- Amendments to windows/doors/openings that will not have any impact on neighbouring properties

However, this advice is given on an informal basis only and is therefore not binding on any future recommendation, which may be made to the Council or any formal decision by the Council. We consider the following to normally take a development beyond the scope of the permission and will therefore require a fresh application to be submitted:

- Significant increase in the volume of the building/extension
- Significant increase in the height of the building/extension
- Changes which would conflict with a condition on the original approval
- Additional and/or repositioned windows/doors/openings that will have an impact on neighbouring properties
- Changes which would alter the description of development from the original application

Amendments that would warrant re-consultation either of neighbours, council departments or statutory bodies

Further details are available on our website at: https://www.newark-sherwooddc.gov.uk/planningdecisions/

Disposal of any building waste: If you are having any building or remedial work done on your home or constructing a new dwelling, you have a 'Duty of Care' to ensure your waste is disposed of properly. Any contractor you employ or even if you arrange to have any construction or demolition waste removed yourself, the person you give it to must be a registered waste carrier. You should ask to see their Waste Carriers Licence and obtain a receipt for any waste which is removed. To ensure they are registered, you can also check with the Environment Agency online or by telephoning 08708 506506.

Help to keep our District a cleaner and less polluted place.

LAND TO THE EAST OF NEWLINK BUSINESS PARK, NEWARK

STATEMENT IN SUPPORT OF REPRESENTATIONS TO NEWARK AND SHERWOOD PUBLICATION DRAFT PLAN

October 2023

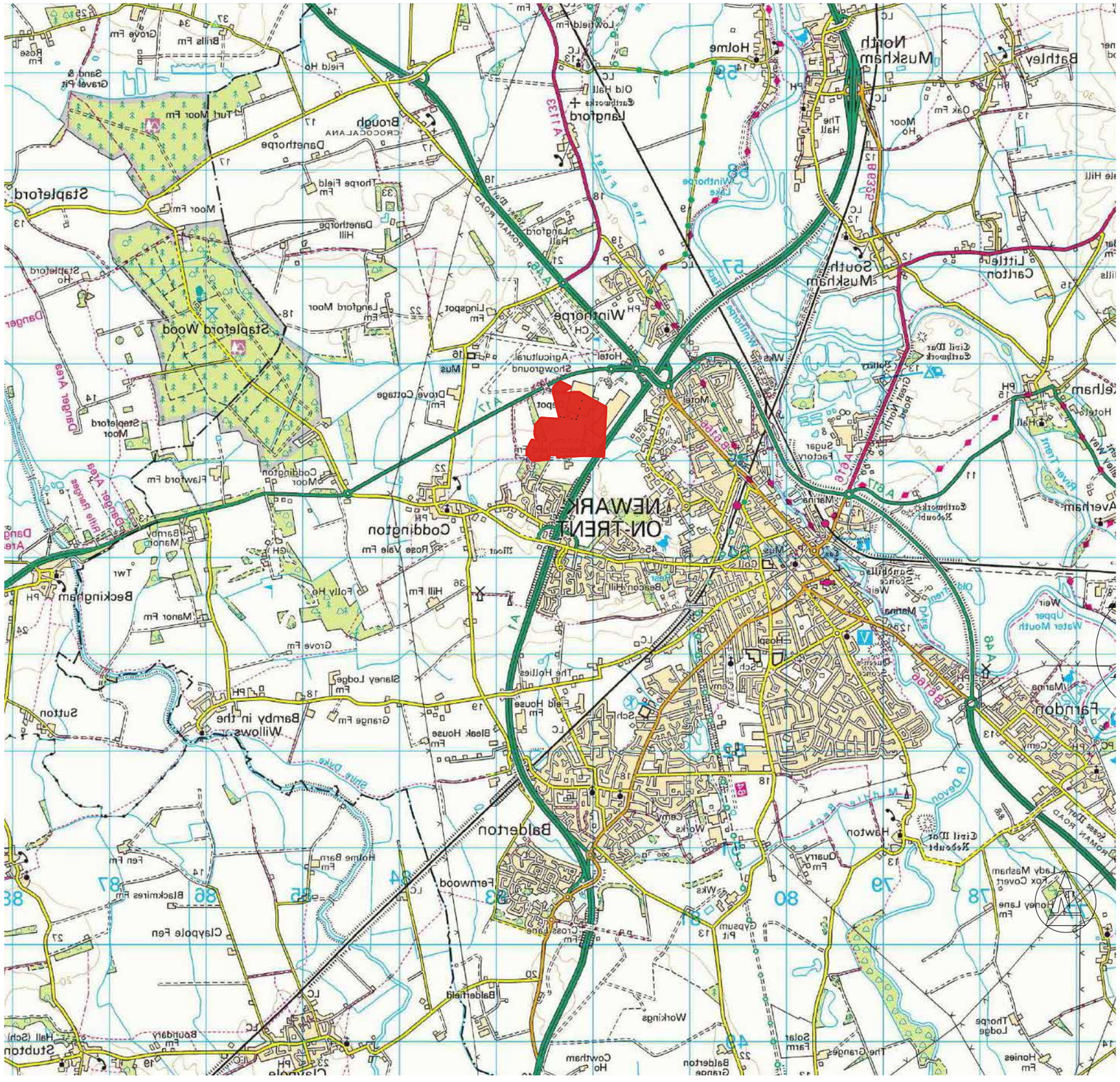
SGP Architects + Masterplanners

DeltaPlanning

TRITAX

SIMONS

CONTENTS



OS Location Plan

1.0 INTRODUCTION

1.1 This document has been prepared to support representations to the Publication Draft Allocations & Development Management Plan. It is submitted on behalf of Tritax Big Box REIT and Simons Developments in relation to land east of Newlink Business Park, Newark.

1.2 This document provides information on the opportunity for logistics led employment development on land to the east of Newlink Business Park. It demonstrates that the site provides a suitable and sustainable option for economic growth to meet identified needs and should be included as an additional employment site in the Site Allocations Plan.

1.3 This statement should be read alongside the main representations submitted to the Allocations & Development Management Plan consultation.

1.4 The scope of this report is as follows:

- Background to Simons Development and Tritax
- Site location and description
- Relevant planning policy
- The development opportunity
- Overview of technical issues and constraints
- Summary and conclusions

2.0 BACKGROUND TO TRITAX AND SIMONS DEVELOPMENTS

2.1 The site is being promoted by Tritax Big Box REIT (TBBR) and Simons Developments.

TRITAX

2.2 Tritax Big Box (TBBR) is a Real Estate Investment Trust listed on the London Stock Exchange as BBOX, dedicated to investing solely in the UK logistics sector. TBBR is the UK's largest listed investor in high-quality logistics warehouse assets, with the UK's largest logistics-focussed land platform. The TBBR portfolio currently comprises 76 fully let income producing assets totalling 36.3 million sq ft with a portfolio value of £5.05 billion (at 30 June 2023). Some tenants within TBBR's portfolio include Amazon, Argos, Tesco, Royal Mail, Ocado, Rolls-Royce, DSG, Sainsbury's, Dunelm, Stobart and Unilever. TBBR is committed to delivering high-quality and sustainable logistics buildings for its customers, and attractive, secure, long-term returns for its shareholders.

2.3 TBBR adds to its portfolio by either purchasing buildings that have already been developed and let, or by creating new investments through development activity across the TBBR land portfolio, through negotiating pre-lets or undertaking speculative developments which are subsequently let to occupiers.

2.4 In 2016, TBBR acquired the national distribution centre let to DSG Retail Ltd, part of the Currys Group, which is one of the two DSG distribution centres located at Newlink Business Park in Newark.

SIMONS DEVELOPMENTS

2.5 Simons Developments is a privately-owned development company, formed out of the Simons Group. The Groups track record includes:

- Construction of global service operations centre for Siemens at Teal Park, North Hykeham, Lincoln with a construction value of £12 million;
- Construction of extension to Asda's distribution centre at Lutterworth, Leicestershire with a construction value of £12 million;
- Design and construction of a production and warehouse facility for soft drinks company AG Barr at Milton Keynes, Buckinghamshire with a construction value of £12 million;
- Construction of 1 million square foot warehouse facility for John Lewis at Magna Park, Milton Keynes, Buckinghamshire with a construction value of £20 million.

3.0 SITE LOCATION AND DESCRIPTION

THE SITE

3.1 Overall the site extends to approximately 47 hectares (gross). This includes the Phase 1 land, which benefits from planning permission and is currently being brought forward for a logistics facility.

3.2 The site is bounded by Newlink Business Park and the A1 to the west, the A17 to the north and open countryside to the east and south.

3.3 The site is relatively level and currently comprises Grade 3 agricultural land. It consists of six arable fields divided by field hedges and trees.

3.4 A public footpath route (Ref. 4A and 5) runs along the eastern and southern site boundary connecting the villages of Coddington with Winthorpe to the north-west of the A46.

SURROUNDING AREA

3.5 Newlink Business Park adjoins the site immediately to the west. It is a successful distribution location employing between 3000-4000 people and is home to the Dixons/ Knowhow Distribution complex, part of which was acquired by Tritax in 2016.

3.6 The site is strategically located close to the A1, A17, A46 interchange, approximately 0.5 km to the north-west of the site. It benefits from good motorway connectivity north and south via the A1/A1M and onto the M1.

Existing Site Plan

4.0 RELEVANT PLANNING POLICY

4.1 The site lies within the open countryside, but immediately adjoins the settlement boundary and urban area of Newark. A brief review of the relevant planning policy context is provided below.

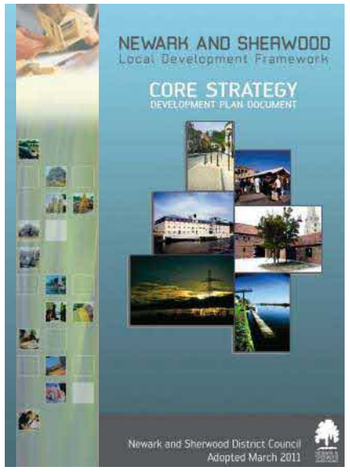
NATIONAL PLANNING POLICY FRAMEWORK (NPPF)

4.2 The NPPF outlines the Government's commitment to ensuring that the planning system does everything it can to help create the conditions in which businesses can invest, expand and adapt. It is clear that significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development.

4.3 The NPPF requires planning policies and decisions to recognise and address the specific locational requirements of different sectors, and this specifically includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations.

AMENDED CORE STRATEGY (MARCH 2019)

4.4 Newark and Sherwood District Council adopted its Amended Core Strategy in March 2019.



4.5 The Core Strategy seeks to focus significant new housing and employment growth in Newark Urban Area, which is the main settlement in the District and a Sub-Regional Centre.

4.6 The majority of growth is to be provided in the Newark Urban Area over the plan period (2013-2033) including 60% of the housing requirement (approx.10,000 new homes) and 83 hectares of employment land.

4.7 To ensure that the housing and employment needs of the District are delivered over the plan period, a number of strategic sites have been identified including Land South of Newark (NAP2A) and Land around Fernwood (NAP2C).

4.8 At Spatial Policy 9 it is also acknowledged that from time to time the Council will need to allocate additional sites to meet the development needs of the District. The policy sets out 10 guiding principles which will be used to make such allocations which can be summarised as follows:

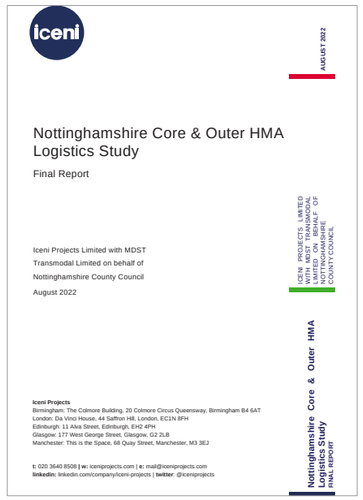
- Be in, or adjacent to, the existing settlement;
- Be accessible and well related to existing facilities;
- Be accessible or capable of being made accessible to public transport;
- Be the most sustainable in terms of impact on existing infrastructure;
- Appropriately address the historic environment;
- Appropriately address the findings of the Landscape Character Assessment;
- Not impact on designated sites of high biodiversity and give preference to sites of lesser environmental value, securing net gains to biodiversity where possible;
- Not lead to the loss of locally important open space and views;
- Be located in areas at the lowest risk of flooding; and
- Not lead to the sterilisation of known mineral resources.

4.9 The proposal site satisfies all of these criteria as recently accepted through the recent approval of the Phase 1 scheme.

ALLOCATIONS AND DEVELOPMENT MANAGEMENT DPD

4.10 The current Allocations and Development Management DPD was adopted in July 2013. Its main purpose is to allocate sufficient land for housing, employment and retail uses to meet the needs of Newark and Sherwood to 2026 and beyond. This DPD is currently under review with the Publication Draft now published for consultation and is the focus of this statement.

EMPLOYMENT LAND EVIDENCE



4.11 The most relevant and up to date evidence base for this proposal is the Nottinghamshire Core & Outer HMA Logistics Study published in August 2022 (the Logistics Study). This study was commissioned by Nottinghamshire County Council on behalf of the Nottinghamshire Core and Outer Housing Market Area authorities including Newark & Sherwood. The purpose of this study was to understand the future demand for strategic warehousing and logistics facilities within the area.

4.12 The Logistics Study concludes that there is an overall need for some 1,486,000 sqm of logistics space for the period 2021-2040 with some of this demand expected to be met in Newark along the A1 and A46 corridors. This level of need is significantly greater than the available supply which is estimated as some 800,000 sq.m.

4.13 The Logistics Study identifies the three main existing sites in Newark (these being Land south of Newark, remaining land at Stephenson Way, and the ex G Park site) as forming part of the supply. In full knowledge of these sites, it still recommends Newark as an Area of Opportunity – i.e. it accepts that other sites should come forward. It also notes the existing supply is, in part, constrained. It also recognises that some of the consented/allocated land that makes up the supply will also be required to meet wider employment land needs (i.e. rather than just logistics).

4.14 The Logistics Study recommends a criteria-based approach when identifying and assessing potential new sites as follows:

- Close to a junction on the motorway network or dual-carriageway with sufficient network capacity;
- Sufficiently large and flexible in configuration so it can accommodate a range of size of units, with a minimum size of 25 hectares;
- Connected to the National Grid with sufficient capacity for power supply;
- Accessible to labour ;
- Located away from incompatible land uses.

4.15 The Logistics Study also provides a sequential order for sites to come forward as follows:

- Extensions to existing logistics parks;
- New parks on previously developed land (pdl);
- New parks on greenfield sites.

STRATEGIC HOUSING AND EMPLOYMENT LAND AVAILABILITY ASSESSMENT (SHELAA)

The latest SHELAA was published in 2022. It assesses the suitability of the land to the east of the Newlink Business Park under Ref. 16_0174 and has classified it as ‘May be suitable’.

DSG National Distribution Centre, Newark

5.0 THE DEVELOPMENT OPPORTUNITY

5.1 The land east of Newlink Business Park was submitted to the District Council for consideration through the Local Plan in 2016 and has subsequently been promoted for employment uses through each stage of the Local Plan review.

5.2 The site quite clearly falls within one of the 5 'Areas of Opportunity' for logistics as identified in the Nottinghamshire Logistics Study and also meets the 5 criteria for site selection as follows:

- It is close to a junction on the long-distance dual-carriageway network (A46/A1), with network capacity upgrades already programmed during the plan period.
- It is sufficiently large and flexible in configuration so it can accommodate a range of size of units, with a size greater than 25 hectares.
- It can be connected to the National Grid with sufficient capacity for power supply.
- It is readily accessible to labour, being on the edge of the Newark urban area.
- It is located away from incompatible land uses.

5.3 Furthermore, as an extension to an existing logistics park, it comes top of the list in the sequential order of sites that the Study recommends.

Site Location Plan

5.4 The development team promoting the site has an established and extensive track record delivering large logistics parks successfully across the UK. It is therefore a highly deliverable scheme.

5.5 Reserved Matters approval for a first phase of development (circa 37,000sq.m of floorspace) was granted in March 2023 following outline planning approval in November 2022. Construction is due to commence on site shortly. This first phase amounts to approximately 28% of the proposed development and includes the provision of a new access roundabout off A17 which would serve the wider proposal. Through outline planning process and consideration of the detailed Phase 1 proposals at Reserved Matters stage, key issues were considered and resolved as follows:

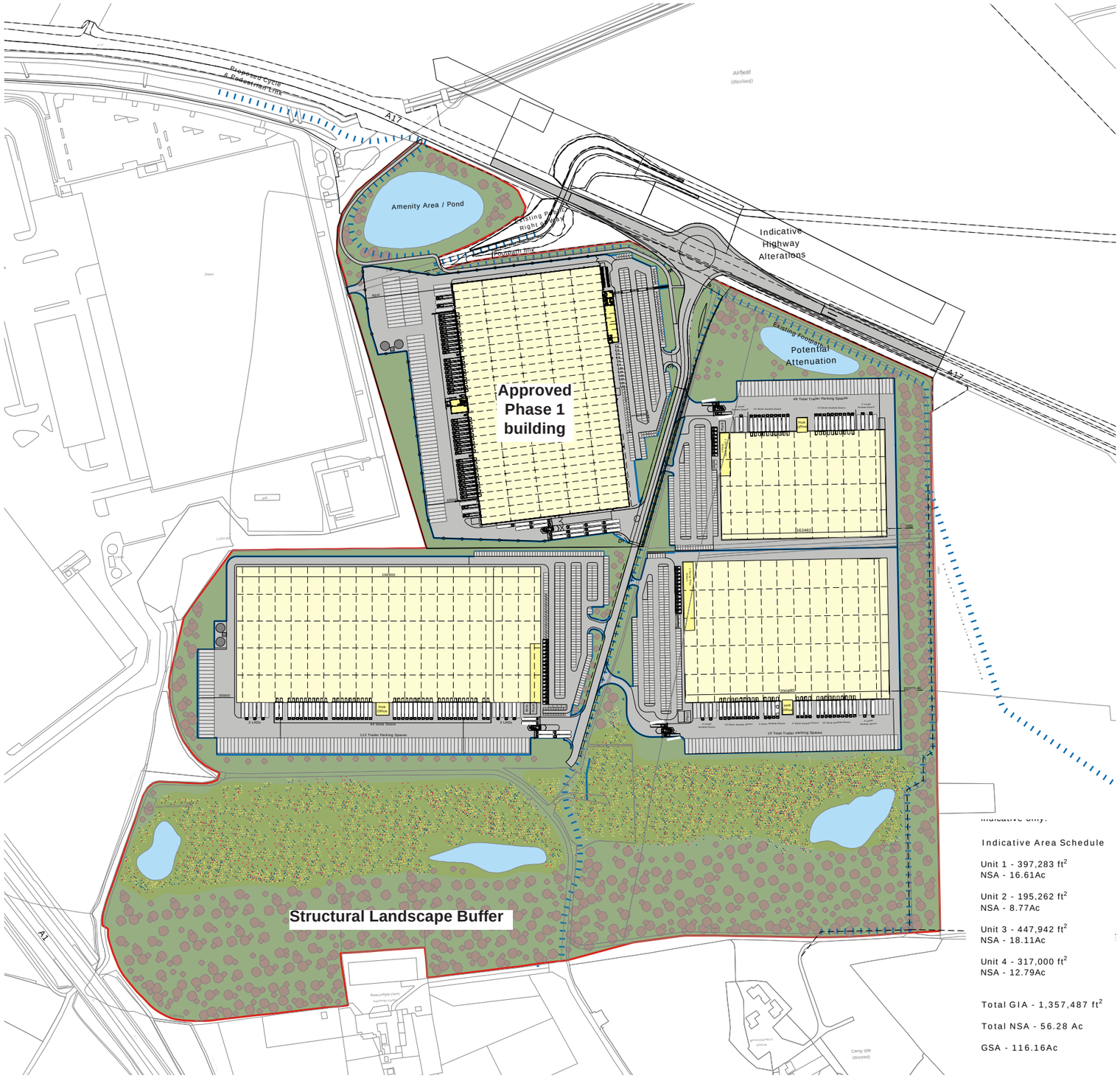
- The details of a new roundabout access junction on the A17 into the site;
- The general suitability of the location in landscape and heritage impact terms;
- The limited impacts in terms of ecological interests;
- The general acceptability of the location in flood risk and drainage terms;
- The absence of any other significant harm arising from a development in this location.

Approved Phase 1 Scheme

5.6 An initial masterplan has been prepared which demonstrates that the site is capable of accommodating a range of large footprint user requirements within Use Classes B2 and B8, with a total potential floorspace of some 130,000 square metres. Buildings will be of a high specification, with unit sizes determined by market requirements.

5.7 The key benefits of this proposal are summarised as

- Experienced development team with a proven track record of delivering employment parks of this nature;
- Ideally location site to help meet the need for additional logistics sites as established by recent Nottinghamshire Logistics Study;
- Provision of circa 25ha development area (net) and circa 22ha of associated green/blue infrastructure;
- Potential for 130,000 sq.m. of employment space with access to existing highway infrastructure;
- Phase 1 (37,000 sq.m.) benefits from detailed RM approval for a single logistics building with development to commence shortly;
- Provision of a range of building sizes to accommodate market demands;
- Logical extension to existing logistics facilities to the north-west with potential to support around 2,000 jobs;
- Proposals set in a managed high-quality landscaped environment with enhanced landscape buffers and green corridors to secure on-site biodiversity net gain.



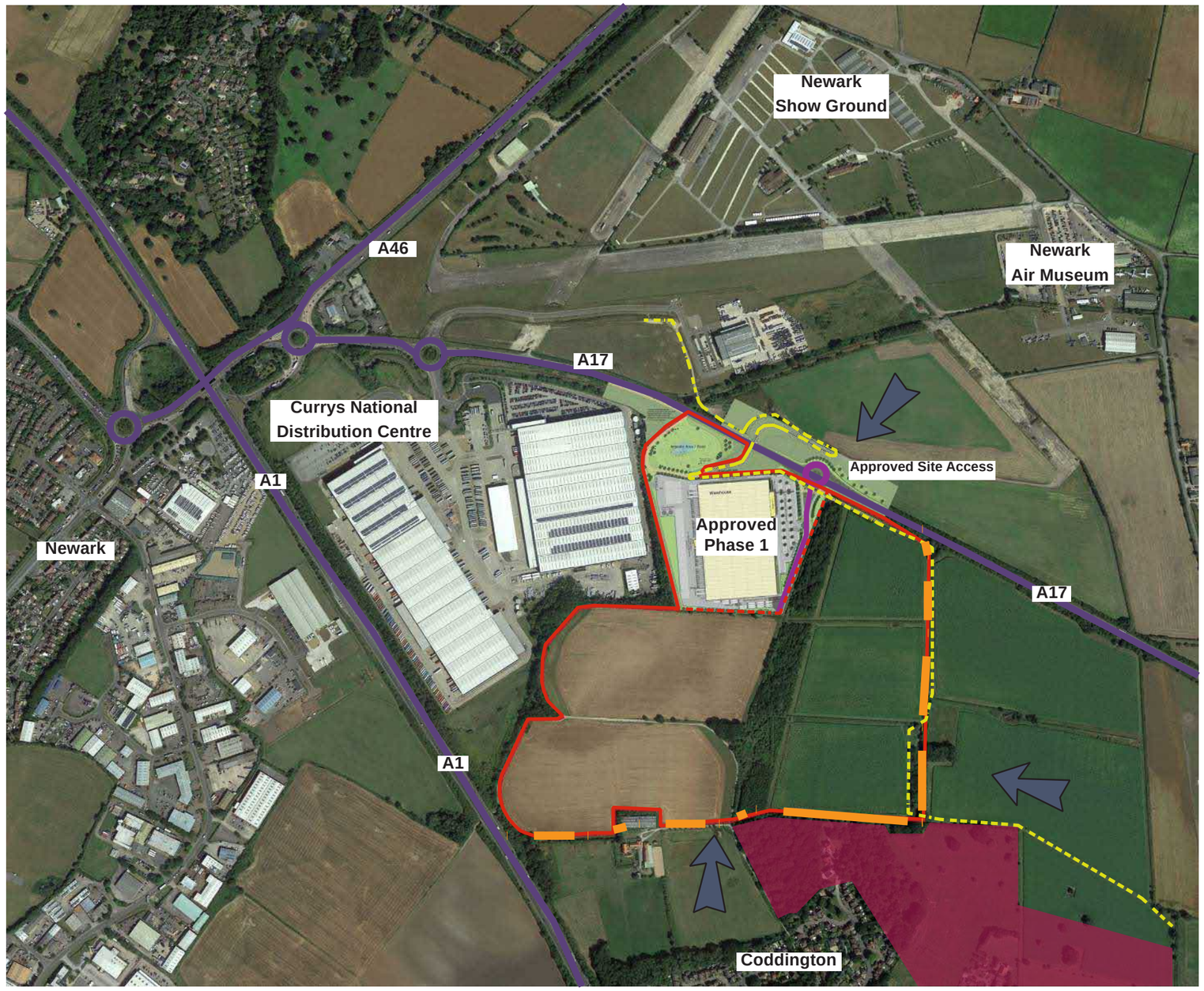
Proposed Illustrative Masterplan

6.0 SUMMARY OF TECHNICAL ISSUES AND SITE CONSTRAINTS

6.1 As with any development site, there are a range of environmental and technical considerations that need to be considered as part of any development allocation. The following section of this document identifies those aspects that need to be considered. Known baseline conditions, the data required to assess impacts and the scope for any mitigation measures are discussed.

6.2 The key issues for this development will be:

- Traffic and Transportation;
- Landscape and Visual Impacts;
- Ecology;
- Archaeology and Cultural Heritage;
- Flood Risk and Drainage; and
- Ground Conditions.



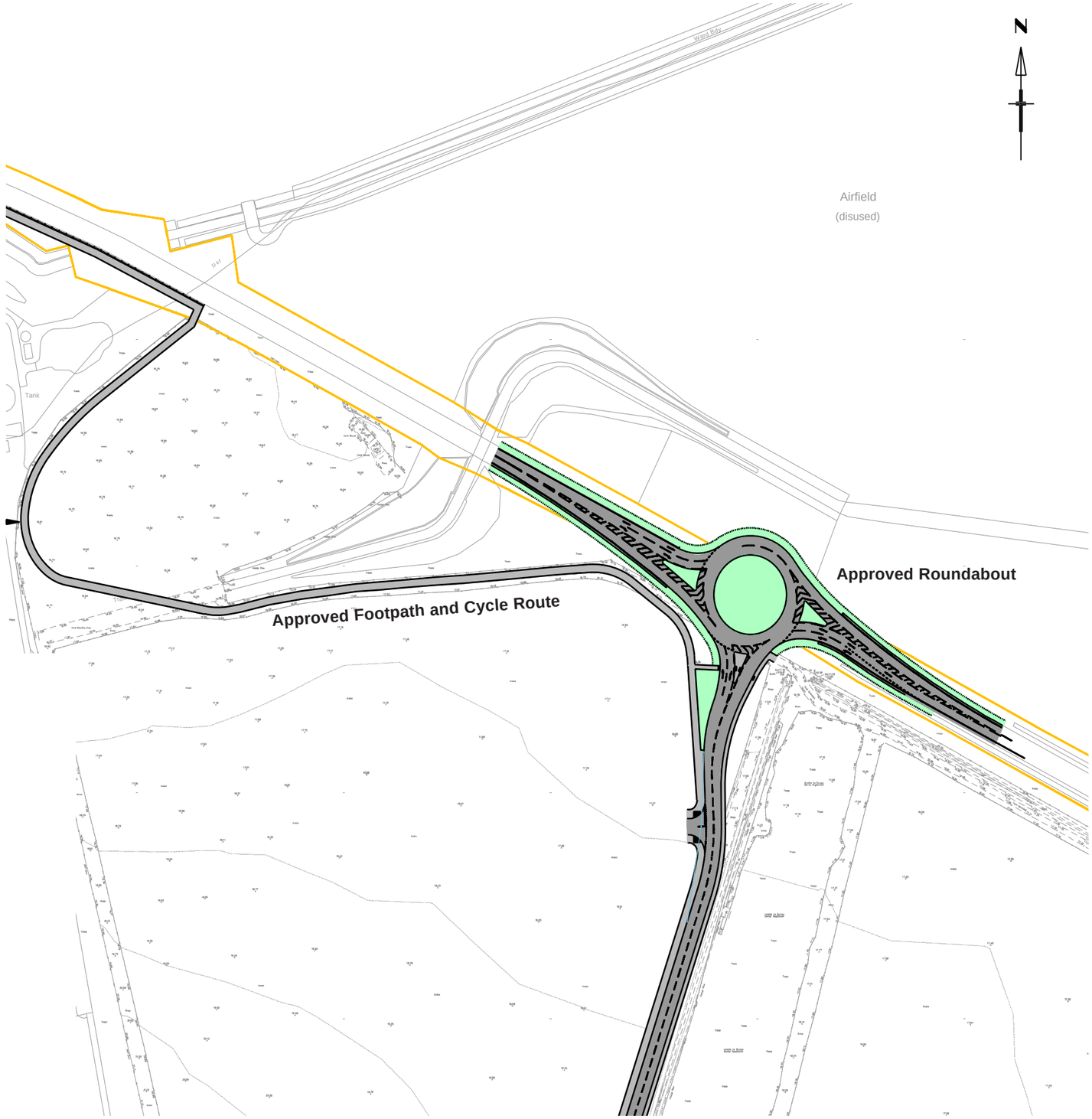
Constraints and Opportunities Plan

TRAFFIC AND TRANSPORTATION

6.3 The site is located between the A1 and A17 adjacent to Newlink Business Park, which is accessed off the A17. It lies approximately 0.5 km from the A1/A46/A17 junction.

6.4 As shown on the approved Phase 1 Plan and the overall illustrative layout, it is proposed to access the site directly via a new 3-arm roundabout on the A17. This access has already been approved through the Phase 1 outline planning permission.

6.5 With regard to sustainable transport provision, the approval for Phase 1 has included a commitment to extend the existing footway/ cycleway along the south side of the A17 from the A17/Long Hollow Way roundabout to the proposal site. This will be provided as a 3m surfaced route and would provide an extension to the public footpath/cycleway network. It will link into the existing public footpath network providing connections to the south to Coddington and to the north via the existing bridge over the A17. These existing pedestrian routes then connect to bus stops on Lincoln Road.

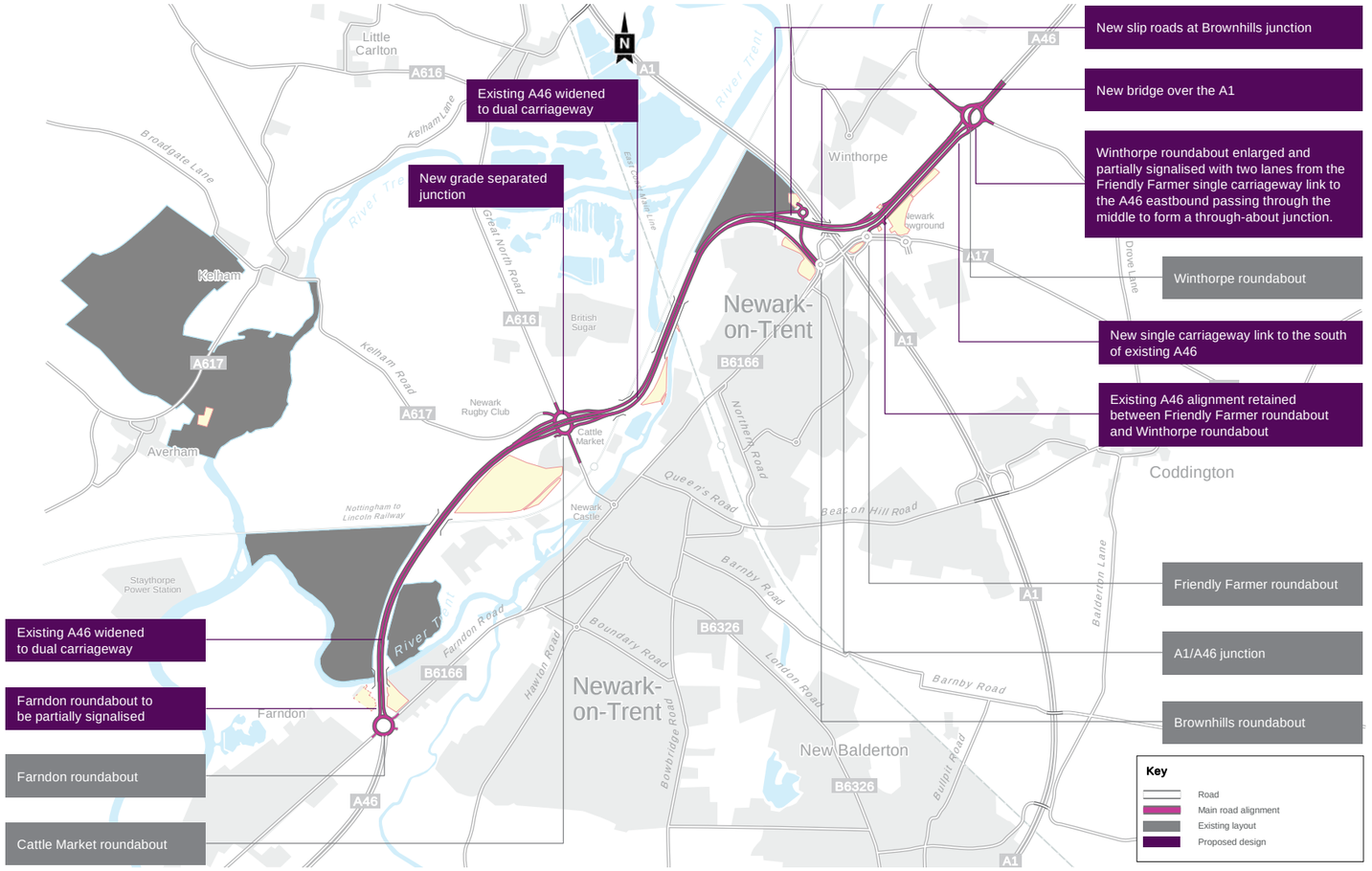


Approved Site Access, Roundabout, Footway and Cycle Route

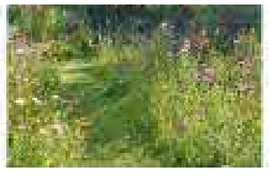
6.6 For the wider site it is known that there are capacity constraints at the A1/A46 junction and along the A46 corridor. Both the district and county councils have long recognised that these junctions and the congestion they cause need to be addressed to help promote economic growth in Newark. Because of this a large amount of CIL receipts have been earmarked for improvements to the A46 junctions.

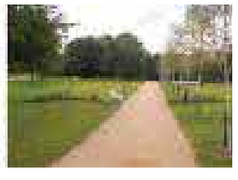
6.7 In addition, major infrastructure improvements to the A46 were announced in the Government's 2014 Road Investment Strategy which details a programme of works for an A46 Newark northern bypass. Design work for this is now well advanced on this major infrastructure improvement with consultation on the detailed plans undertaken at the end of 2022 and further targeted consultation in April 2023.

6.8 Given the above it is clear that the required network improvements for this area are now in the pipeline and should be delivered during the lifetime of the Site Allocations Plan. Therefore highway network capacity should not prevent the site from being included in the Plan, at the very least on a phased basis pending the completion of the network upgrade works.



A46 Newark bypass scheme map





LANDSCAPE

6.9 The landscape sensitivity of the area was considered at length as part of the approved Phase 1 application and found to be acceptable with good design and landscaping. There is no reason to suggest that the wider scheme would also not be acceptable in a similar way. Of particular note is that the proposed illustrative scheme includes a significant landscape buffer to the south to provide screening and maintain a rural buffer between the development and the village of Coddington to the south.

6.10 The Newark & Sherwood Landscape Assessment SPD (2012) shows the site in an area of flat and gently undulating arable landscape with numerous woodland blocks and settlements, and it considers the landscape sensitivity of this area to be moderate. The site borders the urban area of Newark and whilst currently in agricultural use it does not connect well to the wider rural landscape of the area and therefore makes a limited contribution to the rural character of this landscape. It contains an existing framework of vegetation along its site boundaries and it is considered that opportunities exist through the proposed scheme to strengthen this to enhance the wooded structure of the landscape.

ECOLOGY

6.11 The ecological value of the area was considered in detail as part of the approved Phase 1 application and found to be acceptable with mitigation. There is again no reason to suggest that the wider scheme would also not be acceptable in a similar way.

6.12 The site is for the most part intensely farmed arable land and is not located in an area that is particularly sensitive in terms of ecology. There are no nationally or locally designated sites on or immediately surrounding the site. Of particular note is that the proposed illustrative scheme includes a significant landscape buffer to the south within which it will be possible to deliver an on-site biodiversity net gain.

6.13 As with any development site of this nature, a detailed ecological appraisal would have to be carried out to identify any habitats and wildlife on the site worthy of protection and/or enhancement. However, based on the site's current use and its characteristics, it is not expected that ecology will place a particular constraint on the site's development for employment uses.

ARCHAEOLOGY AND CULTURAL HERITAGE

6.14 There are no listed buildings on the site or immediately adjoining land. However, the Coddington Conservation Area lies to the site's southern boundary.

6.15 The heritage impact on the area was considered at length as part of the approved Phase 1 application and found to be acceptable in that case. The proposed illustrative scheme includes a significant landscape buffer to the south to provide screening and maintain a rural buffer to ensure the setting of the Conservation Area is not subject to substantial harm, and with this in place there is no reason to suggest that the wider scheme would also not be acceptable in a similar way as the Phase 1 approval.

6.16 As part of Phase 1, a full archaeological site investigation was carried out and whilst this revealed significant archaeological material, it was concluded that in that case the finds are not of schedulable quality and would not warrant preserving beyond the excavation and recording undertaken. Similarly, the wider site is likely to have some archaeological potential, but this is unlikely to prohibit its development.

FLOOD RISK AND DRAINAGE

6.17 As shown on the Environment Agency Flood Risk Map, the site lies entirely within Flood Zone 1 and therefore is at low risk of flooding.

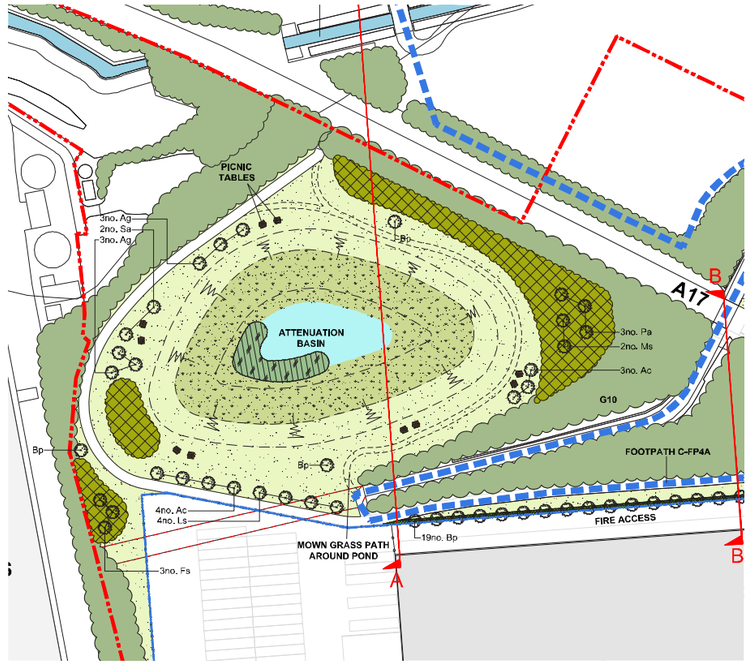
6.18 As part of the Phase 1 application an acceptable surface water drainage strategy was approved and whilst detailed proposals for the wider site will have to be developed in due course there are no constraints in this regard. The principles of sustainable urban drainage systems (SUDS) will be adhered to throughout.

GROUND CONDITIONS

6.19 As part of the Phase 1, ground investigations were undertaken and no ground constraints or significant contamination was identified. Whilst an assessment of the wider site will have to be undertaken in due course there are not likely to be any major constraints in this regard.

DELIVERABILITY

6.20 The site is being promoted by Tritax and Simons Developments. As set out in Section 2 of this document they have a hugely successful track record of delivering commercial developments of this nature and the site can therefore be considered to be available and deliverable. Indeed, Phase 1 is now under way with anticipated completion of this first phase of development in 2024.



SUDS pond

7.0 SUMMARY AND CONCLUSIONS

7.1 This document has been prepared to support representations to the Publication Draft Site Allocations & Development Management Plan. It is submitted on behalf of Tritax Big Box REIT and Simons Developments in relation to land east of Newlink Business Park, Newark.

7.2 The proposal site extends to approximately 47 hectares (gross) and lies immediately east of the Newlink Business Park and the A1, and south of the A17. Phase 1 of the wider development benefits from detailed planning approval with development to commence on site shortly.

7.3 The site is promoted for employment use and there are no known technical or land ownership constraints. An initial masterplan for the site has been prepared and shows how the site could accommodate a range of large footprint user requirements within Use Class B2 and B8, with a total potential floorspace of some 130,000sq.m.

7.4 It is considered that the site presents an excellent opportunity for large scale employment development which could be brought forward during the plan period. It should therefore be considered as an additional employment allocation to help ensure that there is a sufficient choice of employment sites for strategic logistics or other large scale employment footprint users.

7.5 The key benefits of this proposal are summarised as:

- An experienced development team with a proven track record for delivering employment parks of this nature;
- The site is ideally located to help meet the need for additional logistics sites as established through the recent Nottinghamshire Core & Outer HMA Logistics Study;
- Potential for 130,000 sq.m of employment space with access to existing strategic highway infrastructure;
- Phase 1 (37,000 sq.m) benefits from detailed Reserved Matters approval for a single logistics building with development to commence shortly on site;
- Provision of a range of building sizes to accommodate market demands;
- Logical extension to existing logistics facilities to the north west;
- Potential to support around 2,000 jobs;
- Proposals set in a managed high quality landscaped environment with enhanced landscape buffers and green corridors to secure on-site biodiversity net gain.

View of the proposed Phase 1 unit from the car park

View of the proposed Phase 1 unit from A17

View of the proposed Phase 1 unit from the new roundabout

SGP
Architects + Masterplanners

Waterfront House
2a Smith Way
Enderby
Leicester
LE19 1SX

DeltaPlanning

1 Chester Court
1677A High Street
Knowle
Solihull
B93 0LL

TRITAX

Sandbrook House, 4th Floor
2-5 Old Bond Street
London
W1S 4PD

SIMONS

991 Doddington Road
Lincoln
LN6 3AA