International Advanced Manufacturing Park Employment Land Position Statement

Sunderland City Council and South Tyneside Council
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1.0 Introduction

- This Position Statement has been produced by Nathaniel Lichfield & Partners (Lichfields) on behalf of Sunderland City Council and South Tyneside Council. It has been commissioned to inform a review of the International Advanced Manufacturing Park (IAMP) Area Action Plan (AAP) which was adopted in November 2017. In particular, it considers whether the current area of land identified for employment development at the IAMP remains sufficient to meet anticipated needs, having regard to:
 - 1 Trends in the automotive industry since the adoption of the AAP and the future outlook for the industry. This includes the evolution of the industry's business and investment models in response to macroeconomic factors and the shift to electrification; and
 - The scale and format of observed demand at the IAMP to date. This takes into account recent developments, as well as current, active enquiries from prospective occupiers.
- 1.2 It should be noted that the purpose of this Position Statement *is not* to generate revised estimates of the scale of job growth that could be attracted to the IAMP. The scale of the employment opportunity associated with the site was explored at length in developing and refining the IAMP proposition and has been tested at Examination in Public. Rather, the purpose of this document is to consider whether in broad terms the prospects for the sectors being targeted by the IAMP remain strong and whether the scale of individual requirements and the space utilisation rates observed at the IAMP align with those originally envisaged.
- 1.3 The work has been informed by a review of press articles, research reports and think pieces regarding the automotive industry, as well as an analysis of data held by Sunderland City Council and South Tyneside Council. In addition, Lichfields has conducted one-to-one interviews with key stakeholders including:
 - 1 Economic Development/Inward Investment Officers at Sunderland City Council;
 - 2 Investment North East England (INEE); and
 - 3 The North East Automotive Alliance (NEAA).

The IAMP

- The IAMP is located next to Nissan Motor Manufacturing UK's (Nissan's) Sunderland plant, the UK's largest and most productive car manufacturing facility, with output in 2022 exceeding 238,000 vehicles.
- The Sunderland plant has been located in the area since 1985 and is a major local employer. The IAMP provides a bespoke, world class environment for the automotive supply chain, as well as the advanced manufacturing and distribution² sectors with the intention of contributing significantly to the long-term economic success of the North East and supporting the Government's levelling-up agenda.

 $^{^1\,}https://europe.autonews.com/automakers/nissan-asks-uk-help-ensure-future-sunderland-plant$

² The IAMP AAP makes provision for distribution activity on-site, albeit only where such activity is directly related to the Automotive and Advanced Manufacturing sectors

- The IAMP AAP establishes the planning policy framework needed to deliver the IAMP. It covers a 15-year period from 2017 to 2032 and provides for the development of approximately 392,000sq.m of floorspace for production, supply chain and distribution activities related to the automotive and advanced manufacturing sectors. This is to be delivered within a developable area of 150ha, with a further (indicative) 110ha of land set aside as an Ecological and Landscape Mitigation Area (known as the ELMA).
- 1.7 More recently, land at the IAMP was designated as an Investment Zone site forming part of the North East Devolution Deal (shown in red hatching Figure 1.1). This is discussed in greater detail in Section 4.0.

Figure 1.1 Map of the IAMP Investment Zone



Source: Invest North East England

Structure

- 1.8 The remaining sections of this document are structured as follows:
 - Section 2.0: provides an overview of the scale and importance of the North East's automotive manufacturing cluster;
 - Section 3.0: summarises the need case underpinning the IAMP AAP (which influenced both the scale and format of land identified for development);
 - Section 4.0: examines the evolution of the IAMP need case, unpacking those macroeconomic trends of most relevance to the IAMP proposition;
 - Section 5.0: provides an overview of recent demand for land and floorspace at the IAMP, as well as indicators of future need;
 - Section 6.0: examines the impact of the evolving need case on the scale and format of development at the IAMP and the extent to which this aligns with the assumptions underpinning the IAMP AAP;
 - Section 7.0: considers the opportunities to accommodate additional land needs associated with the IAMP; and
 - Section 8.0: summarises the key messages from the preceding sections.

Regional Automotive Cluster

- The North East has an established automotive manufacturing cluster, the growth and competitiveness of which is promoted by the NEAA. Data published by the NEAA provides a helpful insight into the composition of the cluster. The regional automotive industry is estimated to turnover £11 billion per annum and to export vehicles worth £7.4 billion each year.
- 2.2 The NEAA categorises businesses operating in the industry as follows:
 - · Original Equipment Manufacturers (OEMs); and
 - Supply chain businesses.
- 2.3 A summary of each is provided below.

Original Equipment Manufacturers

- The latest industry profile published on the NEAA website states that the North East is home to five leading OEMs in the automotive industry including Nissan, Komatsu and Caterpillar. Taken together, the NEAA estimates that these OEMs produced almost 450,000 vehicles in 2018. The North East accounts for approximately 30% of all passenger vehicles produced in the UK and 20% of all battery electric vehicles produced in Europe.
- 2.5 The diversity of OEMs represented in the region is considered by the NEAA to be a key strength of the North East's offer. OEMs include: a volume car manufacturer (Nissan, the UK's most productive car plant); off-highway vehicle manufacturers; (the region is home to three of the UK's top five off-highway manufacturers); and engine manufacturers.

Supply Chain Businesses

- A large supply chain has developed to serve the region's OEMs (and other automotive manufacturers located beyond the North East). The NEAA estimates that there are more than 200 supply chain companies located in the area, including;
 - More than 30 Tier 1 suppliers³;
 - In excess of 200 Tier 24 to Tier 3+5 suppliers;
 - A wealth of specialist SMEs; and
 - · Over 20 dedicated R&D facilities.
- 2.7 The regional supply chain includes a number of leading global brands such as Faltec, Gestamp, SNOP, Unipres and Envision AESC.

³ Suppliers that an OEM directly conducts business with. In the automotive sector, this could include manufacturers of light modules, door systems, cockpits etc.

⁴ Businesses providing materials to Tier 1 suppliers. In the automotive sector, this could include manufacturers of control units, windows, radio units, handles, cladding etc.

⁵ Tier 3 suppliers are one further step removed from the final product, providing material to Tier 2 suppliers. In the automotive sector, this is likely to include individual parts

Clustering of Employment

2.8

2.9

2.10

Data from the Office for National Statistics' (ONS) Business Register and Employment Survey (BRES) provides a useful starting point for understanding the scale and geographical distribution of employment within the North East's automotive cluster. For the purposes of this analysis, the automotive manufacturing industry has been defined as comprising of the following Standard Industrial Classification (SIC) codes:

- SIC 29100: manufacture of motor vehicles;
- SIC 29201: manufacture of bodies for motor vehicles (excluding caravan);
- SIC 29310: manufacture of electrical/electronic equipment for motor vehicles; and
- · SIC 29320: manufacture of other parts and accessories for motor vehicles.

The data is summarised in Table 2.1. This indicates that, in 2021, the automotive industry accounted for more than 13,000 jobs in the region. The majority of these jobs related to either: the manufacture of motor vehicles (7,655 jobs); or the manufacture of other parts and accessories (5,090 jobs).

Table 2.1 Automotive Employment (North East)

	SIC 29100	SIC 29201	SIC 29310	SIC 29320	Total
County Durham	600	15	100	400	1,115
Darlington	20	10	0	15	45
Gateshead	30	75	50	20	175
Hartlepool	0	10	0	400	410
Middlesbrough	0	О	0	0	0
Newcastle Upon Tyne	5	100	0	10	115
North Tyneside	0	О	0	0	0
Northumberland	0	О	0	45	45
Redcar & Cleveland	0	О	0	250	250
South Tyneside	O	0	0	300	300
Stockton on Tees	1,000	10	0	150	1,160
Sunderland	6,000	0	O	3,500	9,500
Total	7,655	220	150	5,090	13,115

Source: BRES / Lichfields analysis

The data also illustrates the importance of Sunderland to the North East automotive industry, with the local authority accounting for 9,500 jobs - more than 70% of all jobs in the region. This can also be seen in Figure 2.1 (also based on BRES data). This highlights a clear cluster of activity in the North West of the Sunderland local authority area (in close proximity to Nissan) as well as the importance of the wider A19 Corridor, which includes parts of South Tyneside and East Durham.

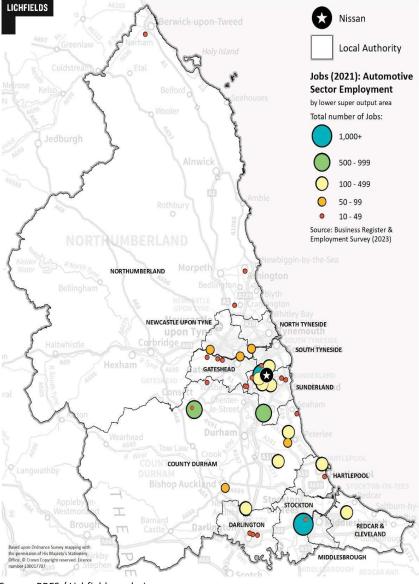


Figure 2.1 Spatial Distribution of Automotive Employment (North East)

Source: BRES / Lichfields analysis

The data presented in the preceding paragraphs provides a useful overview of the spatial distribution of automotive employment across the Nort East. It should be noted, however, that it does not appear to capture all of the jobs attributable to the industry. Indeed, the previous iteration of the North East Local Enterprise Partnership's (NELEP's) Strategic Economic Plan stated that: "automotive manufacture employs over 30,000 people, higher than any other UK region." Similarly, the latest intelligence published on the NEAA website estimates that there are 30,000 people employed in the industry across the North East, generating an average Gross Value Added per employee of almost £112,000 per annum.

2.12 It is clear, therefore, that the automotive industry is an important subset of the North East economy.

3.0 Original Need Case

In considering whether the current area of land identified for employment development at the IAMP remains sufficient to meet future needs, it is important first to establish the assumptions which informed the need case underpinning the IAMP AAP. This is outlined in the following paragraphs.

Demand Forecasting Scenarios

- 3.2 The IAMP AAP was adopted in November 2017. The examination of the AAP was supported by a variety of Technical Background reports. This included the Commercial and Employment Technical Background Report (Updated February 2017) which represented a key document in establishing the overall need case for the IAMP. The Technical Background Report draws upon analysis from The Sunderland & South Tyneside Strategic Employment Study (2013) in considering the quantum of employment land/floorspace required at the IAMP to respond to the opportunities anticipated at that time.
- 3.3 The Strategic Employment Study assessed anticipated future trends in high growth industries across the North East, with a particular focus on the automotive, advanced manufacturing/engineering, distribution and offshore renewable sectors. This analysis was used to construct three alternative growth scenarios (using production and sales forecasts) to identify potential floorspace demand in the period up to 2032. The scenarios are summarised below?
 - **Very optimistic** a large scale growth scenario requiring an advanced manufacturing park of c.300ha. This was predicated on the following assumptions:
 - i Automotive: step increase in production at Nissan facility and associated supply chain (particularly Electric Vehicle production) due to increased demand from overseas markets;
 - ii Advanced Manufacturing: market entry of two average sized chemical companies and expansion of a chemicals company already in situ. Plus small, advanced manufacturing companies entering the market every three years;
 - iii Development of a new university facility to support R&D and training needs for the automotive and advanced manufacturing sectors; and
 - iv Distribution: market entry of a large-scale retail distributer and additional smaller scale retailer or manufacturer.
 - **Moderate** significant growth potential requiring an advanced manufacturing park of c.140ha 150ha. This was predicated on the following assumptions:
 - i Automotive: steady increase in North East production, focused on the existing Nissan operations and supported by a number of supply chain moves;
 - Advanced manufacturing: market entry of two average sized chemicals companies and expansion of a chemicals company already in situ. Plus small,

⁶ Paragraph 64, Commercial and Employment Technical Background Report (Updated February 2017)

⁷ Paragraphs 65-67, Commercial and Employment Technical Background Report (Updated February 2017)

- advanced manufacturing companies entering the market every three years; and
- iii Distribution: staggered market entry of three smaller retailers or manufacturers who are attracted by the infrastructure and facilities offered.
- Pessimistic assumed a long period of recession for the North East combined with structural changes to the automotive industry and re-location of production away from the region. This was predicated on the following assumptions
 - i Automotive: marginal decline in North East production resulting from supply moving to under-utilised plants in Europe;
 - Advanced manufacturing: market entry of an average scale chemicals provider to support production of batteries for electric cars; and
 - iii Distribution: no growth assumed.
- 3.4 The Commercial and Employment Technical Background Report (Updated February 2017) ultimately concludes that the IAMP AAP should plan to meet the requirements associated with the moderate scenario, with Paragraph 192 of the document stating that:

"In order to meet forecast demand and provide an attractive location to the target sectors, IAMP needs to be of sufficient scale to enable development to meet these requirements.

Therefore the overall site is required to be between approximately 100ha and 150ha."

- This conclusion was tested by an independent inspector as part of the process of taking the IAMP AAP through to adoption. The Inspector's Report (issued November 2017) proposed a Main Modification to the AAP to allow for the allocation of 150ha of land for development. Paragraphs 36 and 37 of the Inspector's Report are summarised below. At the request of the Inspector, the AAP was modified to allocate 150ha of land for development, with this figure adopted by South Tyneside Council and Sunderland City Council:
 - "...As submitted for Examination this policy [Policy S1 of the AAP] proposes the release of 100ha of Green Belt for employment development and the release of 50ha of Green Belt to be designated as safeguarded land for potential longer-term development. Policy S2, as submitted then details the circumstances in which, through review of the plan, the safeguarded land might be released for development.

However, as discussed at the hearings, the evidence (Docs SD28 and PSD11) indicates that the realistic, moderate growth forecast is for a requirement for approximately 150ha of employment land over 20 years. There is no specific evidence showing that only 100ha (i.e. two-thirds of the total requirement) would be needed in the next 15 years (i.e. three-quarters of the forecast period)."

Demand Forecasting: Key Input Assumptions

- 3.6 In identifying a future requirement for 150ha of employment land, the evidence-based documents which informed the current IAMP AAP had regard to the following input assumptions:
 - The scale of economic opportunity presented by the IAMP and the number of jobs that could be attracted to the site;

- The employment densities to be achieved on site (i.e. the quantum of floorspace per worker); and
- The plot ratios to be achieved on site (i.e. the relationship between floorspace and site area).
- 3.7 This is unsurprising as these key relationships would typically be considered when forecasting future land needs as part of an Employment Land Review or similar. This is recognised in Paragraph 2a-030-20190220 of the Planning Practice Guidance on Housing and Economic Needs Assessment:

Employment Growth

3.8 The foreword to the IAMP AAP outlines the scale of employment growth the IAMP was intended to accommodate. It states that Sunderland City Council and South Tyneside Council:

"anticipate circa 7,850 jobs being created across the advanced manufacturing and automotive sectors with companies that will benefit from being close to Nissan and from the infrastructure and skilled workforce that exists here."

- As set out in Section 1.0, it is beyond the scope of this exercise to revisit this level of assumed employment growth. The current AAP and the underlying evidence base were tested at Examination in Public, with the Inspector's Main Modifications endorsing an employment growth figure of 7,850 jobs (as well as a corresponding need for 392,000sq.m of floorspace to be delivered on 150ha of land).
- 3.10 Notwithstanding the above, it is considered that the IAMP offers the potential to deliver high levels of employment growth. This reflects a number of factors, which are summarised below and discussed in greater detail elsewhere in this report:
 - The scale of opportunity associated with the automotive industry's shift to electrification. Research by the Faraday Institution forecasts that the number of workers in the UK automotive industry could increase from 150,000 in 2022 to 270,000 in 2040, with further growth in the supply chain. In addition, the Advanced Propulsion Centre estimates that electrification could be worth £24 billion to the UK economy;
 - Further growth opportunities in the UK automotive industry linked to an increasing emphasis on vehicle customisation (which is expected to drive demand for more localised supply chains) and a more general requirement to address existing Tier 1 and 2 supply chain gaps;
 - The strategic importance of the IAMP to the future of UK automotive, by virtue of its proximity to the UK's most productive car plant (at Nissan) and its status as the location of the only EV battery gigafactory in Britain (January 2023);
 - The economic importance of the advanced manufacturing and distribution sectors⁸ at the North East Local Enterprise Partnership (NELEP) level. The NELEP Strategic Economic Plan identifies advanced manufacturing as an area of strategic importance

⁸ The IAMP AAP identifies floorspace to accommodate production, supply chain and distribution activities related to the automotive and advanced manufacturing sectors

(defined as sectors with the potential to deliver economic growth, higher quality jobs and productivity improvements). The same document categorises transport and logistics as a key enabling service (defined as sectors with the potential for significant growth in higher value jobs);

- The recent designation of land at the IAMP as part of the North East Investment Zone, offering a range of fiscal incentives to prospective occupiers. These incentives include SDLT relief, employer NI contributions relief and business rates relief, as well as an enhanced capital allowance and structures and buildings allowance;
- Stakeholder feedback which has indicated that the IAMP is viewed as one of the "premier advanced manufacturing sites in the North East" and acts as a "key inward investment lever" in pitching the region to prospective inward investors; and
- The scale of occupier interest in land/premises at the IAMP, as evidenced by data regarding live enquiries provided to Lichfields by Sunderland City Council's Economic Development Team.

Employment Densities

The Sunderland City Deal - IAMP Project: Schedule of Floorspace and Employment (2014) provides a detailed breakdown of the assumed relationship between employment growth and floorspace demand at the IAMP. This is summarised in Table 3.1. It is understood - based upon discussions with Council officers - that this analysis was informed by a review of employment densities observed across a sample of Tier 2 suppliers based in Sunderland at the time. These densities were then extrapolated out and applied to employment growth projections for the site.

The table assumed that employment growth at the IAMP could total 5,228 jobs (subsequently revised upward to 7,850 jobs during the IAMP AAP Examination in Public) which is expected to generate a requirement for 261,250sq.m of employment floorspace (subsequently revised upward to 392,000sq.m during the IAMP AAP Examination in Public). Lichfields is advised by Council officers that all employment figures contained within the table are expressed on the basis of headcount (rather than Full-Time Equivalent) jobs.

Table 3.1 Implied Employment Densities

		Phas	e One			Phas	e Two			Phase	Three		Totals
	Of	fices	B2	/B8	Of	fices	B2	/B8	Of	fices	B2	/B8	
Year	sqm	Jobs	sqm	Jobs	sqm	Jobs	sqm	Jobs	sqm	Jobs	sqm	Jobs	
18/19	2,500	147	25,000	403									
19/20	2,500	147	25,000	403									
20/21	700	41	7,000	113	1,700	100	17,000	274					
21/22					3,200	188	32,000	516					
22/23					3,200	188	32,000	516					
23/24					3,200	188	32,000	516					
24/25									2,250	132	22,500	363	
25/26									2,250	132	22,500	363	
26/27									2,250	132	22,500	363	
Totals	5,700	335	57,000	919	11,300	665	113,000	1,823	6,750	397	67,500	1,089	
Sqm/phase			62,700				124,300				74,250		261,250
Jobs/phase				1,255		·		2,487				1,486	5,228

Source: Sunderland City Deal - IAMP Project: Schedule of Floorspace and Employment (2014)

- 3.13 Using the data contained within Table 3.1, Lichfields has derived the underlying employment density assumptions. These are broken down by use class and summarised in Table 3.2.
- 3.14 The table clearly highlights that the evidence compiled as part of the City Deal agreement assumed that development *across all phases of the IAMP* would come forward at an employment density of 50sq.m per headcount job. It can also be seen that, whilst a higher density figure of 62sq.m per job was applied to industrial (B2/B8) uses, this was tempered by the assumption that 10% of jobs within each phase would be office-based (formerly use class B1) where densities of 17sq.m per job would be achieved.

		Phase One			Phase Two			Phase Three		
		I	mplied l	Employn	nent Den	sities (so	m per job)			
	B1	B2/B8	Total	B1	B2/B8	Total	B1	B2/B8	Total	
18/19	17	62	50							
19/20	17	62	50							
20/21	17	62	50	17	62	50				
21/22				17	62	50				
22/23				17	62	50				
23/24				17	62	50				
24/25							17	62	50	
25/26							17	62	50	
26/27							17	60	50	

Table 3.2 Implied Employment Densities

Source: Sunderland City Deal - IAMP PROJECT: SCHEDULE OF FLOORSPACE AND EMPLOYMENT (2014) / Lichfields analysis

- As recognised above, the analysis presented in Tables 3.1 and 3.2 is underpinned by employment and floorspace assumptions that have since been revised upwards as part of the IAMP AAP Examination in Public. Indeed, the Inspector's Main Modifications recommend that:
- The employment growth target is amended from 5,200 jobs to 7,850 jobs;
- The floorspace requirement is amended from 260,000sq.m to 392,000sq.m; and
- The associated land need is amended from 100ha to 150ha.
- The level of detail contained in Tables 3.1 and 3.2 regarding the relationship between floorspace and jobs is not available for the higher figures included within the adopted AAP. It should, however, be acknowledged that dividing 392,000sq.m of floorspace by 7,850 jobs also yields an employment density of 50sq.m per worker.

Plot Ratios

3.15

- 3.17 No data has been made available to Lichfields regarding the methodology/assumptions applied in deriving an overall planning land requirement (in hectares) from the floorspace figures discussed in the preceding paragraphs.
- 3.18 The IAMP AAP makes provision to deliver 392,000sq.m of employment floorspace on 150ha of land. This corresponds to a plot ratio of 0.26, which represents a relatively low level of coverage (most Employment Land Reviews typically apply a plot ratio of 0.40 to

industrial (B2/B8) uses). It should, however, be noted that this figure falls within the range typically observed on business park environments (0.25 to 0.40) as identified within the Employment Land Reviews: Guidance Note published by the former Office of the Deputy Prime Minister. Whilst this document dates from 2004, Lichfields is not aware of any comprehensive analysis of plot ratios having been published more recently.

It is recognised that the figure applied to the IAMP is lower than the ratios typically achieved on industrial estates (0.35 to 0.45). It may be, however, that a conscious decision was taken to apply the business park figure in an effort to better reflect the quality of the environment envisaged at the site.

Scale of Anticipated Enquiries

- In unpacking the assumptions that underpin the IAMP AAP, it is also helpful to understand the scale of individual developments originally envisaged. Part 2 of the Site appraisals for South Tyneside Council and Sunderland City Council (2013) was informed by a review of enquiries for industrial development space received by each authority. Based upon this analysis, the document identified an "average requirement of 24,700sq.m, covering a range from 10,000sq.m to 40,000sq.m."
- 3.21 More recently, the IAMP AAP Commercial and Employment Technical Background Report arrived at a similar conclusion. It advised that the IAMP's target sectors of automotive and advanced manufacturing "require accommodation on large scale floor plates ranging from 9,000sq.m to 37,000sq.m, depending on the nature of operations."
- 3.22 Council officers have advised that both of the above exercises were predicated on demand being driven by the re-shoring of supply chain businesses linked to the Qashqai and Juke models produced by Nissan. As such, they assumed (not unreasonably) that future demand for buildings would be at a similar scale to existing occupiers in the regional automotive supply chain. The work therefore failed to take into account the emerging need to secure domestic battery manufacturing capabilities to facilitate the shift towards the electrification of the automotive industry. This is considered in greater detail in subsequent sections of this document.

Evolution of the Need Case

- The IAMP AAP was adopted in November 2017. The quantum of development proposed within the AAP was predicated on the economic need case established in documents such as the *IAMP Impact Study Topic Papers* (2015), the Commercial and Employment Technical Background Report (Updated February 2017) and the Sunderland & South Tyneside Strategic Employment Study (2013). As outlined elsewhere in this document, the evidence underpinning the current AAP has been tested by an independent inspector.
- The IAMP AAP was adopted after the UK referendum on EU membership, albeit a considerable degree of uncertainty remained regarding the terms of the future trading relationship between the two areas. Similarly, the future growth scenarios which underpinned the current IAMP AAP and its evidence base foresaw the shift to electrification in the automotive industry, although the pace of change has arguably been greater than originally envisaged.
- 4.3 Mindful of the above, as well as the recent designation of land at the IAMP as part of the North East Investment Zone, this section provides an update on the recent/likely future impacts of:
 - The electrification of the automotive industry;
 - EU Exit, the EU-UK Trade and Co-operation Agreement (and, in particular, the implications of the Rules of Origin clause); and
 - The North East Investment Zone.

Electrification

- The UK Government is committed to achieving 'net zero' by 2050, as set out in the Climate Change Act (as amended in 2019). Transport is estimated to be responsible for 15.8% of the UK's greenhouse gas emissions. This demonstrates the importance of decarbonising transport by moving away from the Internal Combustion Engine (ICE) towards hybrid and Electric Vehicles (EVs) to achieving the UK Government's net zero ambitions. In September 2023, the UK Government announced that the sale of new petrol and diesel cars will end by 2035¹⁰ (having previously set a more ambitious target of 2030).
- It is understood, however, that Nissan remain committed to phasing out ICE vehicles by 2030. Following Rishi Sunak's announcement that the Government would delay the ban on the sale of new ICE vehicles to 2035, Nissan's president and chief executive, Makoto Uchida, stated:

"Nissan will make the switch to full electric by 2030 in Europe. We believe it is the right thing to do for our business, our customers and for the planet...There's no going back. The world needs to move on from internal combustion engines."11

4.6 A variety of data sources serve to illustrate that the availability and customer acceptance of hybrid and EV vehicles has increased in recent years. Indeed, research published by the

⁹ UK Environmental Accounts (2021) Office for National Statistics

¹⁰ https://www.autocar.co.uk/car-news/consumer/2030-uk-car-ban-delay

 $^{^{11} \}underline{\text{https://www.motorfinanceonline.com/news/nissan-reinstates-its-commitment-to-going-all-electric-by-2030/#:^:text=Nissan%20will%20not%20back%20down,comes%20to%20transitioning%20into%20EVs}$

Society of Motor Manufacturers and Traders (SMMT)¹² shows that the number of hybrid and EV models available on the market within the UK increased from 65 to almost 140 over the period 2015 to 2020 (Figure 4.1).

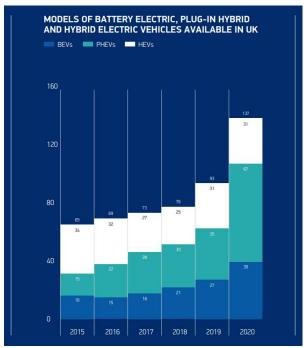


Figure 4.1 Growth of Hybrid and EVs (2015-2020)

Source: Delivering the Triple Bottom Line: A Blueprint for the Electric Vehicle Revolution, SMMT

- In addition, data published by the Driver & Vehicle Licensing Agency (DVLA) reveals that new car registrations in the UK during 2022 were broken down as follows:
 - 821,000 petrol cars (50% of all registrations);
 - 332,000 Hybrid EV cars (20%);
 - 267,000 Battery EV cars (16%);
 - 128,000 diesel cars (8%);
 - 101,000 Plug-in Hybrid EV cars (6%); and
 - 4,000 using other fuel types (0.2%).
- 4.8 Benchmarking the above figures for 2022 against data for 2017 points towards a significant shift in car registrations by fuel type over the five-year period:
 - Petrol registrations decreased by 40%;
 - Diesel registrations decreased by 88%;
 - Hybrid EV registrations increased by 359% (around 4.5 times higher);
 - Plug-in Hybrid EV registrations increased by 207% (around 3 times higher); and
 - Battery EV registrations increased by 1,818% (around 19 times higher).

¹² Delivering the Triple Bottom Line: A Blueprint for the Electric Vehicle Revolution, SMMT

- The electrification of the automotive industry, and of advanced manufacturing as a whole, will create opportunities to grow new/existing businesses and attract new ones to ensure that supply chains develop to meet the needs of the changing technology. The UK must look to leverage its engineering heritage and strengths in digital and emerging technologies to ensure that it benefits from this and secures market share in the face of global competition. The Advanced Propulsion Centre suggests that supply chains for the future production of EVs will become increasingly localised "to ensure they are cost-effective and competitive."
- 4.10 The IAMP, with land located in close proximity to Nissan's Sunderland plant and the wider North East automotive cluster, is well placed to compete for such opportunities.

Scale of Opportunity

- 4.11 Research published by the Faraday Institution in June 2022¹⁵ seeks to quantify the scale of economic opportunity associated with the shift to electrification. In headline terms, the work concludes that: "the global transition from manufacturing ICE vehicles to EVs will have a considerable impact on the UK labour market."
- More specifically, the base case scenario developed to inform the research forecasts that the total number of employees in the automotive and EV battery ecosystem could increase from approximately 150,000 in 2022 to 270,000 by 2040. This corresponds to an additional 120,000 jobs. Within this new EV-focused automotive industry, the Faraday Institution anticipates the following employment breakdown by 2040:
 - 145,000 jobs will be directly supported in passenger and light commercial EV production;
 - 25,000 jobs will be supported by the manufacture of HGVs, buses and small lightweight vehicles;
 - 35,000 jobs will be supported in UK battery manufacturing plants; and
 - 65,000 jobs will be supported in the battery supply chain.
- In addition to the direct automotive and battery supply chain impacts outlined above, the research anticipates that a further 700,000 people will be employed in the wider automotive industry and indirect supply chain by 2040. It is understood that this includes activities which act in support of the automotive industry including logistics, mechanical engineering, construction, finance, administration, sales, marketing etc.
- In addition to the above, research conducted by the Advanced Propulsion Centre¹⁶ sought to quantify the economic value that could be captured by the UK as a result of electrification.

 ¹⁷The study highlights the importance of establishing the production of electric batteries at scale to the UK's future prospects of success in this regard:

¹³ Full Throttle: Driving UK Automotive Competitiveness, SMMT

¹⁴ Strategic UK opportunities in passenger car electrification, Advanced Propulsion Centre UK

¹⁵ UK Electric Vehicle and Battery Production Potential to 2040, The Faraday Institution

¹⁶ The Advanced Propulsion Centre seeks to accelerate the transition to a net-zero automotive industry

¹⁷ Strategic UK opportunities in passenger car electrification, Advanced Propulsion Centre UK

"Without underlying base facilities such as domestic battery production and an electrified supply chain in the UK, industry could easily underperform its potential." 18

- Whilst the research covers the period 2020 to 2025, the rollout of gigafactories to produce EV batteries in the UK has been slow to date. As of January 2023 the existing gigafactory in Sunderland was the only operational facility in Britain. As a result, it is considered reasonable to assume that many of these opportunities have yet to be captured.
- The Advanced Propulsion Centre research states that the UK "already has the building blocks of a thriving [EV] supply chain and therefore provides a good backdrop for investments across these new value chains to meet domestic, European and in some cases global demand." Within this context, a series of key opportunities which the UK is particularly well placed to address are identified. These are grouped together under the broad categories of batteries, power electronics and electric machines and set out below. In total, they are estimated to be worth a potential £24 billion to the UK economy:²⁰
 - **Batteries (£12bn opportunity):** the complete process from mining raw materials to manufacturing the finished battery pack involves over 40 distinct manufacturing processes and at least 30 semi-finished product stages. Within this, it is considered that the UK has particular strengths/opportunities related to cathode materials refining; cathode manufacturing; anode manufacturing; electrolyte manufacturing; cell assembly; and manufacture of battery pack components;
 - Power electronics (£10bn opportunity): to achieve the optimal performance in terms of power, weight and range, electrified vehicles will require a new breed of high-performance power electronics (for inverters, converters and charging equipment) based on compound semiconductors. The Advanced Propulsion Centre identifies particular opportunities for the UK focussed on the manufacture of semiconductors; sensors; and high performance passive components;
 - Electric machines (£2bn opportunity): all passenger cars (battery or hydrogen powered) are likely to be propelled by electric motors in future. The UK has a large number of highly innovative electric machine developers and producers working on a wide range of technologies, topologies and applications. The main opportunities in the supply chain for the UK relate to: magnet manufacturing; electrical steel manufacturing; and electrical machine assembly and testing.
- The importance of battery production to unlocking the above opportunities (and to the continued success of the UK automotive industry) is recognised by many commentators. In their publication Delivering the Triple Bottom Line: A Blueprint for the Electric Vehicle Revolution, the SMMT suggest that battery plants will become increasingly important in influencing automotive investment/location decisions:

¹⁸ Full Throttle: Driving UK Automotive Competitiveness, SMMT

^{19 &}lt;a href="https://www.economist.com/britain/2023/01/24/britains-carmaking-industry-is-increasingly-under-threat?utm_medium=cpc.adword.pd&utm_source=google&ppccampaignID=18151738051&ppcadID=&utm_campaign=a.22brand_pmax&utm_content=conversion.directresponse.anonymous&gclid=CjwKCAjw69moBhBgEiwAUFCx2HcyxUvSKdaQPzyeae2PG3ITkHEFUrleJrrXavbYQWM5quX9-EUDZxoCAGAQAvD_BwE&gclsrc=aw.ds</p>

²⁰ Strategic UK opportunities in passenger car electrification, Advanced Propulsion Centre UK

"Manufacturers are likely to want to concentrate electric vehicle production close to where batteries are produced - it provides greater supply reliability, lower logistics costs and allows just-in-time production flexibility. The UK must therefore expand domestic battery production to secure the long-term future of domestic automotive manufacturing."

As the location of the only operational EV battery gigafactory in Britain as of January 2023 - and the UK's most productive car plant - Sunderland (and the IAMP in particular) would appear to be well placed to capitalise on the opportunities outlined above.

BREXIT

4.18

In considering how the UK's departure from the European Union (EU) has influenced demand for space at the IAMP, it is necessary to have regard to the impact of the EU Exit deal generally and the introduction of the Rules of Origin clause. Both of these are considered in the following paragraphs.

EU Exit Deal and Tariffs

- 4.20 The UK's decision to leave the EU (following the 2016 referendum) acted as a catalyst for a period of uncertainty for Foreign Direct Investment (FDI) in the UK and the automotive industry was not exempt from this.
- Foreign-owned manufacturing businesses have typically been attracted to the UK by the English language, the flexible labour market and the permissive business environment, as well as the prospect of frictionless trade with the EU. The result of the referendum created a risk that this could be lost, thereby removing one of the UK's main competitive advantages in relation to attracting/retaining automotive FDI.
- Following a lengthy period of negotiation, the terms of the EU Exit deal were set out within the final Trade and Cooperation Agreement (TCA), which was agreed between the UK and the EU in December 2020. The Economist²¹ suggested that the TCA resulted in some friction to trade between the two areas due to the introduction of customs checks and fees. These issues, however, were considered to be minor in comparison with the potential imposition of 10% tariffs on imports and exports under World Trade Organisation rules²² in the event that no deal had been struck. As a result, the TCA was generally well received by both:
 - **The industry:** the SMMT²³ responded to the TCA by stating that "the tariff-free, quota-free trade industry has called for has been secured in principle"; and
 - Industry commentators: an article published in January 2021 by the London School of Economics²⁴ declared the TCA: "good news for the manufacturing sector in the UK, as goods (including cars) will be more or less freely traded between the UK and EU without many of the obstacles a hard Brexit would have imposed."

²¹ Britain's car industry is finding Brexit far less of a problem than expected, The Economist, 10 July 2021

 $^{^{22}}$ Britain's car industry is finding Brexit far less of a problem than expected, The Economist, 10 July 2021

²³ www.smmt.co.uk/industry-topics/europe-and-international-trade/

²⁴ Brexit, batteries and the fate of the British car industry, London School of Economics, 25 January 2021

Rules of Origin: Overview

- 4.23 It should be noted that the TCA also includes a 'Rules of Origin' clause. The clause has significant implications for the future of the UK automotive industry particularly as it moves towards electrification.
- The Rules of Origin (RoO) clause was designed to stop companies from importing goods from a third country, and re-exporting them as if they were domestically produced. For the purpose of determining whether tariffs should be imposed, the TCA treats Britain and the EU as a single bloc. Countries with which both have a trade deal (such as Japan) are not included in calculations of local content for UK exports to the EU.²⁵
- This presents a risk of creating considerable new barriers to trade. Up until 31 December 2020, any product made in the UK could be sold anywhere in the UK and the EU without incurring import or export tariffs. From 1 January 2021, however, UK car manufacturers have had to prove that a certain percentage of a component/finished product has been manufactured in the UK/EU to qualify for zero tariffs.
- To help businesses transition to the new arrangements, the threshold for local content will increase over time. From January 2021, UK car makers were required to prove that local content accounts for at least 40% of the value of parts in a finished car exported to the EU to avoid import/export tariffs. This threshold rose to 45% from 2023 and will increase again to 55% from 2027.²⁶
- The above figures relate to traditional petrol and diesel vehicles. For hybrid and electric vehicles, the local content thresholds are less onerous to begin with. Thresholds will also rise to 55% by 2027, however.²⁷ This reflects the fact that the transition to complying with RoO local content thresholds will be particularly challenging for electric vehicles, given that:
 - EV batteries account for approximately half of the total value of a car; and
 - The majority of EV batteries are currently imported from the US or Asia.
- As a result of the above, most electric vehicles would currently be subject to import/export tariffs even at the 55% threshold in 2027. This issue has been acknowledged as a key challenge facing the industry by commentators:

"[RoO are] particularly challenging for EV production because batteries alone, which are currently mainly imported from Asia or the US, often make up 50% of the total value of a car." **London School of Economics**²⁸

"This [RoO clause] is likely to be a significant challenge for the British EV industry. EV batteries, the single most expensive component, are traditionally made in Asia, making this subject to new taxes. As Europe is the biggest market for British-made vehicles, the UK automotive industry has to find new ways to ensure continued profitability when trading with the EU." **Trackwise**²⁹

²⁵ Britain's car industry is finding Brexit far less of a problem than expected, The Economist, 10 July 2021

²⁶ Brexit, batteries and the fate of the British car industry, London School of Economics, 25 January 2021

²⁷ Brexit, batteries and the fate of the British car industry, London School of Economics, 25 January 2021

²⁸ Brexit, batteries and the fate of the British car industry, London School of Economics, 25 January 2021

²⁹ Trackwise blog article

4.29

4.30

"If you are not sourcing the batteries domestically, I don't see how you can stay compliant [with RoO]." **The Economist**³⁰

Rules of Origin: Implications for UK Automotive Industry

Given the UK's commitment to phase out sales of petrol and diesel vehicles by 2035, the future of the UK automotive industry is inextricably linked with its ability to manufacture hybrid and electric vehicles. Within the context of this shift in the industry, and the need to comply with RoO, it is essential that the UK automotive industry develops a more localised electric vehicle supply chain. In particular, there is a need to focus on the development of battery production facilities. This is widely acknowledged as being critical to ensuring that tariff-free trade with the EU (the UK automotive industry's largest export market) can continue and - as a consequence - to the long-term competitiveness of the industry and therefore ultimately its future existence.

"If OEMs [Original Equipment Manufacturers] can source batteries in the UK, they will invest in EV plants and the British automobile industry has a future." **London School of Economics**³¹

"Rule of Origin requirements could spell its [the UK car industry's] demise in the near future if the UK doesn't boost its efforts to establish a large-scale battery supply chain." London School of Economics³²

"If batteries go out of the UK, then automotive production will go out of the UK." **Ralf** Speth, Chief Executive Officer, Jaguar Land Rover³³

"Without electric vehicle batteries made in the UK, the country's auto industry risks

becoming an antiquated relic...Business sense dictates that the automotive industry will move to where the batteries are, and we are facing a race against the clock." **Dr Andy Palmer, former Chief Executive, Aston Martin**³⁴

"Without large-scale UK battery production, domestic vehicle producers would gradually wind down." **The Economist**³⁵

"Any hope of a revival [in the British automotive industry] relies on British-based firms remaining in the driving seat as the industry switches from internal combustion to electric power. That means attracting more battery-makers." **The Economist**³⁶

Theoretically, UK manufacturers could avoid tariffs by importing batteries from the EU if facilities are developed, at scale, on the continent. In practice, however, this solution is considered unworkable by many commentators and would result in the EU establishing a significant competitive advantage relative to the UK. Batteries are incredibly heavy: an article published in the Financial Times in 2021 estimated that batteries for the Nissan Leaf

³⁰ Britain's car industry is finding Brexit far less of a problem than expected, The Economist, 10 July 2021

 $^{^{31}}$ Brexit, batteries and the fate of the British car industry, London School of Economics, 25 January 2021

³² Brexit, batteries and the fate of the British car industry, London School of Economics, 25 January 2021

 $^{^{\}rm 33}$ Quote taken from the automotive industry magazine, AM Online

³⁴ Build batteries or lose UK car industry, Autocar, 19 January 2021

³⁵ Britain's car industry is increasingly under threat, The Economist, 24 January 2023

³⁶ A big battery investment is good news for British carmaking, The Economist, 20 July 2023

weigh around 300kg each whilst those for the Jaguar I-Pace weigh almost a tonne (once packaged for transport).³⁷ As such, manufacturers are expected to look to locate battery plants in close proximity to their operations, reducing the logistical difficulty and cost of getting batteries on-site.

"Ideally you want your battery plant very close to your manufacturing plant, because of the weight." **Dr Andy Palmer, former Chief Executive, Aston Martin**³⁸

"As EV batteries are heavy and expensive, bringing battery production closer to the automotive manufacturing facility is key to improving profitability and safeguarding the industry against competition from Europe." **Trackwise**³⁹

"UK assemblers could simply import the batteries from the EU. That, however, ignores the fact that the transition to EV production is linked with a shortening of supply chains and a trend towards co-location of battery and vehicle assembly." London School of Economics⁴⁰

"Batteries are bulky, critical components. For manufacturing efficiency and resilience, 'just down the road' is always better." **The Economist**⁴¹

"For batteries this [a local supply chain] is especially important, as they make up a big chunk of the value of new cars and are bulky and expensive to shift around." **The Economist**⁴²

As a result of the above, the UK automotive industry has been lobbying Government to recognise the importance of securing significant investment in battery plants in the short term. It is this wider context which makes Envision AESC's investment at the IAMP (a 108,615sq.m battery plant with the capacity to produce 9GWh of batteries per annum is currently under construction) so fundamental to the continued success of Nissan and the wider North East automotive industry. The proposals will see Envision AESC produce EV batteries adjacent to Nissan, Sunderland. By localising production to the UK, Nissan can shorten its supply chain and reduce the logistical cost and difficulty of getting batteries onsite, as well as meet RoO requirements in relation to local content which ensures they remain exempt from tariffs when exporting to the EU.

North East Investment Zone

- 4.32 Land at the IAMP is designated as falling within the North East Investment Zone, which was established as part of the North East Devolution Deal. The North East Devolution Deal was agreed in December 2022.
- 4.33 The North East Investment Zone is a ten-year programme which aims to unlock growth in the clean energy and green manufacturing sectors, with a particular focus on:
 - Electric Vehicle and battery manufacturing;

³⁷ UK carmakers after Brexit: a race to attract battery production, Financial Times, 4 February 2021

³⁸ UK carmakers after Brexit: a race to attract battery production, Financial Times, 4 February 2021

³⁹ Trackwise blog article

 $^{^{40}}$ Brexit, batteries and the fate of the British car industry, London School of Economics, 25 January 2021

⁴¹ Britain's car industry is increasingly under threat, The Economist, 24 January 2023

⁴² A big battery investment is good news for British carmaking, The Economist, 20 July 2023

- · Offshore and Renewable energy; and
- Associated low-carbon manufacturing, materials and research.
- 4.34 The IAMP is one of four sites which will make up the North East Investment Zone (Blyth Energy Central, the River Tyne Economic Corridor, the IAMP and NETPark in County Durham). A series of fiscal incentives will be available to businesses locating in the IAMP and Blyth Energy Central Investment Zone sites. These incentives are summarised below:
 - Stamp Duty Land Tax (SDLT) Relief: full SDLT relief for land and buildings purchased for commercial use or development for commercial purposes;
 - Employer National Insurance (NI) Contributions Relief: zero-rate employer NI contributions on salaries of any new employee, on earnings up to £25,000 per year (for 36 months per employee). Employees must work in the Investment Zone for at least 60% of their time to be eligible;
 - Enhanced Capital Allowance: 100% first year allowance for companies' qualifying expenditure on plant and machinery asses for use in the Investment Zone;
 - Enhanced Structures and Buildings Allowance: accelerated relief to allow business to reduce their taxable profits by 10% of the cost of qualifying non-residential investment per year, relieving 100% of their cost of structures and buildings over 10 years; and
 - **Business Rates Relief:** full business rates relief to new eligible businesses within an Investment Zone (and certain existing businesses where they expand).
- 4.35 The IAMP's inclusion with the North East Investment Zone could not have been anticipated when the evidence base used to underpin the existing IAMP AAP was prepared. It is anticipated that this recent designation has the potential to increase the attractiveness of the IAMP to prospective occupiers. Indeed, the wider North East Investment Zone is expected to help the North East Combined Authority area secure £3 billion of private sector investment.

5.0 Demand at the IAMP

The following paragraphs provide a summary of observed demand for land and premises at the IAMP to date, as well as the prospects of additional demand coming forward in future. The analysis draws upon a review of: recent activity on the site (completed developments and planning consents); pending planning applications; and indicators of future demand (live enquiries, stakeholder consultation and market intelligence).

Activity to Date

Development

5.2

Since the adoption of the IAMP AAP in late 2017, there has been significant developer interest in the site. As of October 2023, some 44,727sq.m (481,437sq.ft) of gross internal floorspace has been developed out. This includes the following:

- **SNOP:** a French component manufacturer, which produces body-in-white stampings and assemblies for the automotive industry. SNOP first established a presence in Sunderland (within the Nissan plant) in 2010. The company then moved to leased premises on the Stephenson Industrial Estate before building a new, fit-for-purpose facility on the IAMP. The new unit is completed and operational and provides 21,856sq.m of floorspace.
- It is understood that the site is capable of accommodating a further 8,994sq.m of gross internal floorspace to support SNOP's future expansion. The delivery of this space would be subject to a separate planning application and has not been included in the figures presented within this section.
- **Faltec:** Faltec Europe Ltd is part of the Faltec Group, which is headquartered in Japan. Formed in 1989, the company was previously known as Hashimoto Ltd and is an accredited Tier 1 supplier to the automotive industry, manufacturing a wide range of interior and exterior trim products.
- Faltec Europe Ltd has moved to new premises on the IAMP, having previously been located at Boldon in South Tyneside. The planning permission for the new site allows for the delivery of 23,554sq.m of gross internal floorspace,⁴³ to be built in two phases. To date, the first phase (comprising of 11,400sq.m of gross internal floorspace⁴⁴) has been built out. The floorspace figures presented within this section are based upon the phase 1 floorspace only.
- **Unit 6:** developed to deliver a new industrial unit of 11,471sq.m gross internal floorspace. The unit is currently vacant, having previously been in use as a vaccination centre during the Covid-19 public health crisis.

⁴³ Gross internal floorspace figures included to ensure all developments are considered on a consistent basis. The Homes and Communities Agency Employment Density Guide (3rd Edition) suggests gross external areas should be discounted by 5% to estimate gross internal areas. Gross External Area for the site equates to 24,794sq.m

⁴⁴ Gross External Area equates to 12,000sq.m

Planning Consents

- In addition, planning consents are currently in place to deliver a further 288,769sq.m (3,108,284sq.ft) of gross internal floorspace at the IAMP. This relates to the following sites:
 - Envision AESC Plant 2: detailed planning application (Application Ref: 21/01764/HE4) approved to deliver a 108,615sq.m battery plant with the capacity to produce 9GWh of batteries per annum. This site is currently under construction.
 - Land North/East and South of International Drive: hybrid planning application (ST/1172/21/FUL) approved to deliver demolition/early infrastructure works and up to 168,000sq.m of gross internal floorspace. This was a cross-boundary application, with the site falling within the local authority areas of Sunderland and South Tyneside. The application was approved in Q3 2023 and (understandably) no buildings were under construction as of October 2023.
 - **Faltec:** 12,154sq.m of space consented (but as yet undeveloped) at the Faltec site, as discussed in Paragraph 5.2.
- Adding the 288,769sq.m of consented floorspace identified above to the 44,727sq.m of floorspace already developed at the IAMP gives a total of 333,496sq.m of floorspace to be delivered at the IAMP.

Forthcoming Applications

- 5.5 It is understood, based upon discussions with Council officers, that pre-application discussions have been held regarding the proposed development of the following units and that a planning application is anticipated in spring 2024:
 - additional EV battery manufacturing capabilities to supplement the current Plant 1 (currently on-site and operational) and Plant 2 (under construction). It is anticipated that the forthcoming application will seek permission for a further 108,615sq.m of gross internal floorspace.
 - proposed battery packing facility, which it is understood will comprise of 70,000sq.m of gross internal floorspace.
- This application would account for 178,615sq.m (1,922,596sq.ft) of gross internal floorspace. Adding this to the 333,496sq.m of developed/consented floorspace derived above would give a total of 512,111sq.m of floorspace which could be delivered, subject to achieving planning consent.
- It is clear therefore, that consenting the application anticipated in spring 2024 could result in a level of floorspace coming forward at the IAMP that exceeds the quantum assumed within the IAMP AAP. Indeed, the 512,111sq.m derived above is some 120,111sq.m higher than the 392,000sq.m provided for within the AAP.
- 5.8 It is important to note that the anticipated planning application seeks to secure greater EV battery manufacturing and storage capabilities at the IAMP. As set out in previous sections of this Position Statement, the development of domestic EV battery manufacturing at scale is viewed by various commentators as being critical to the long-term competitiveness of the UK automotive industry. This is due to:

- The shift towards the electrification of the automotive industry and the UK Government's intention to end the sale of ICE vehicles by 2035; and
- The importance to the UK automotive industry of maintaining tariff-free trade with the EU. Commentators suggest that this can only be achieved long-term by developing a domestic EV battery supply chain.

Future Prospects

- If the forthcoming application outlined above is granted planning permission, the quantum of floorspace delivered at the IAMP will exceed the 392,000sq.m allowed for within the IAMP AAP over the period 2017 to 2032. The scale of development/developer interest observed to date has been driven at least in part by the increased importance of EV battery manufacturing facilities. The gigafactories and battery packing facilities at the IAMP have come forward/are proposed to come forward at a scale and in accordance with employment densities that were unanticipated within the evidence base underpinning the current IAMP AAP. These issues are considered in further detail elsewhere in this section and in Section 6.0.
- In considering the planning implications of the above, it is also necessary to explore whether any further development is likely to be observed at the IAMP over and above the 512,111sq.m of floorspace comprised of: completed developments; planning consents; and forthcoming planning applications.
- This is explored below, drawing upon market intelligence (principally a review of press articles and consultation with key stakeholders⁴⁵) and a summary of current live enquiries for space at the IAMP.

Market Intelligence

- Market intelligence gathered to inform the production of this Position Statement indicates that significant opportunities exist to attract further investment to the IAMP. The first of these is underpinned by the potential that exists for further investment in the automotive supply chain. The second is linked to demand for advanced manufacturing and distribution floorspace.⁴⁶ These are considered in turn in the following paragraphs.
- In addition to these issues, it should also be noted that the designation of land at the IAMP as part of the North East Investment Zone offers further opportunities to generate demand from prospective occupiers. This is considered in greater detail in Section 4.0.

Automotive Supply Chain

As outlined in previous sections of this document, a number of factors are driving the need to establish more localised automotive supply chains in the UK. The importance of this to the continued success of the industry has been recognised by a number of commentators.

This includes members of the Nissan Board who, in February 2023,⁴⁷ reportedly warned of a

⁴⁵ Stakeholders consulted as part of this study include: Invest North East England; North East Automotive Alliance; and Sunderland City Council's Economic Development Team.

⁴⁶ The IAMP AAP makes provision for distribution activity on-site, albeit only where such activity is directly related to the Automotive and Advanced Manufacturing sectors

⁴⁷ Source: https://www.driving.co.uk/news/business/nissan-issues-warning-over-future-of-sunderland-car-plant/

"lack of a strong local supply chain, inflating the cost of shipping components", as well as the need to "stimulate the rebuilding of the country's shattered automotive supply chain".

- The tone of the February 2023 article is somewhat alarmist. However, the North East Automotive Alliance (NEAA) are of the view that, whilst there is a need to strengthen UK supply chains, a failure to do so is unlikely to be a threat to the future of Nissan's Sunderland plant.⁴⁸ This reflects the following considerations:
 - The strategic importance of the Sunderland plant, which accounts for c.80% of Nissan's European output and is viewed as the company's 'mother plant' within Europe;
 - Sunderland's status as the most productive car plant in the UK and one of the most productive in Europe. The NEAA advise that this is due to a combination of high levels of both automation and volume. This can be seen in pre-Covid data referred to by the NEAA, which shows that:
 - i Nissan produces, on average, 16.5 cars per employee per quarter;
 - ii UK car plants produce, on average, 9.4 cars per employee per quarter; and
 - iii European car plants produce, on average, 7.1 cars per employee per quarter.
 - Nissan EV36Zero initiative, a £1 billion project underpinned by significant investment by Nissan. The initiative is intended to create a flagship EV hub and a world-first EV manufacturing ecosystem. It is comprised of:
 - i £423m of investment by Nissan in the production of a new EV crossover model;
 - ii £450m of investment by Envision AESC to deliver an EV battery manufacturing gigafactory; and
 - iii £80m of investment by Sunderland City Council to establish a renewable electricity microgrid.
- Nissan and the NEAA's view that there is a need to strengthen UK automotive supply chains is also supported by research at the national level, conducted by UK Trade & Investment (now the Department for Business & Trade) and the Automotive Council. The study sought to identify Tier 1 and 2 supply chain gaps which exist in the UK and to quantify the economic value associated with each opportunity.
- $_{5.17}$ The findings of the research are summarised in Table 5.1 and comprise of more than £4.5 billion of supply chain opportunities.

⁴⁸ The exception to this is the business-critical need to develop EV battery manufacturing and power train manufacturing facilities near to Nissan to support the automotive industry's shift to EV

Table 5.1 UK Automotive Supply Chain Gaps

Component	Opportunity Value	Component	Opportunity Value
Engine castings	£550m	12V lead/acid battery	£90m
Steering systems	ring systems £330m Cast aluminium sub- frames		£90m
Trim	£255m	Brakes	£8om
Engine forgings	£255m	Drive shafts	£8om
Pressings and hot stampings	£240m	Fuel tanks	£75m
Seat components	£225m	Engine accessories	£75m
Alloy wheels	£210m	HVAC assemblies	£75m
Lighting	£210m	Misc (pedals, mirrors etc.)	£60m
Electronics	£170m	Shock absorbers	£60m
Plastic mouldings	£150m	Premium finish	£50m
Entertainment and navigation	£135m	Weather strips	£50m
Bearings	£120m	Oil pans	£30m
Instrument clusters	£120m	Switchgear	£30m
Glass	£110m	Other	£520m
Hinges	£105m		

Source: Automotive Council research (shared with Lichfields by NEAA)

It is understood (from discussions with the NEAA) that the analysis was originally developed in relation to the production of ICE vehicles. The NEAA advise that much of the analysis nevertheless remains relevant, as "75% of ICE and EV cars and the associated supply chains are essentially the same." It should be noted, however, that the prospects of landing any inward investments relating to engines and/or fuel tanks (shaded grey in the table) are now considered to be very low. This is because these opportunities relate exclusively to ICE vehicles - the sale of which is to be phased out across the UK by 2035.

The emergence of EV vehicles will see the need for engines and fuel tanks replaced by opportunities linked to the manufacture of EV batteries and power trains. As such, the NEAA estimates that the overall scale of opportunity (£4.5 billion) identified in the Automotive Council research may now represent an under-estimate.

Indeed, Paragraphs 4.12 and 4.16 highlight the scale of opportunity associated with the shift to EV vehicles alone. Key headlines are summarised below:

- The Faraday Institution suggests that the impact on the UK labour market could be in the order of an additional 120,000 jobs between 2022 and 2040 with a further 700,000 in the wider industry and indirect supply chain; and
- The Advanced Propulsion Centre estimates that supply chain opportunities linked to EV could be worth a potential £24 billion to the UK economy.

5.21 Electrification is one of - but not the only - key trend at play in the automotive industry at present. The NEAA has advised that the industry is also currently in the process of shifting

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5.19

from a high volume, low complexity approach to one characterised by high volume and high complexity. This is underpinned by:

- The emergence of autonomous vehicles; and
- An increasing emphasis on customisation.
- 5.22 With respect to the latter, the NEAA outlined that the automotive industry's vision is to offer fully customisable products, delivering a unique car to every customer. Such an approach is expected to drive demand for more localised supply chains. Increasing the number of vehicle configurations increases the number of parts/materials required, making it harder for manufacturers to store them on-site and less practical to ship them internationally given the just-in-time manufacturing processes adopted by the industry. The obvious opportunities for investment that this creates are the NEAA believes linked to the manufacture of parts such as internal trim and mouldings.
- The analysis presented above would appear to suggest that significant potential exists for the IAMP to attract additional automotive investment. Investment is likely to be cyclical, with the NEAA highlighting that inward investment decisions made by the industry tend to reflect the manufacturing lifecycle of a new vehicle model. Supply chains to facilitate the delivery of a new model are typically procured and in place ahead of production commencing, with contract durations generally aligning to the lifecycle of a particular model. As such, there is often little incentive for supply chain businesses to relocate during the lifecycle.
- 5.24 Within the context of the above, the NEAA is of the opinion that to date the launch of the IAMP and timing of development land coming to the market have not aligned particularly well with Nissan models' lifecycles. It was suggested, however, that this would begin to improve over time and that the scale of demand for land and premises at the site could increase moving forward as Nissan gears up to deliver new models at the Sunderland plant.

Advanced Manufacturing and Distribution

- In addition to demand from occupiers in the automotive industry, the IAMP was originally conceived to accommodate demand for advanced manufacturing and distribution uses.⁴⁹ Whilst it is beyond the scope of this exercise to quantify the scale of future demand associated with these uses, it is clear from the current live enquiries considered in Paragraphs 5.28 to 5.37 that the IAMP is proving an attractive location to advanced manufacturing and distribution occupiers associated with the principal uses.
- The appeal of the site to these sectors was identified through consultation with INEE. INEE outlined the belief that the IAMP is now seen as one of the "premier advanced manufacturing sites in the North East" with its appeal underpinned by the availability of good quality land, good accessibility to the strategic road network and a strong brand/good profile as an industrial location. It was also suggested that advanced manufacturers can already "see the value of being associated with the emerging cluster of activity at the IAMP" even if they are not active in the automotive industry.

⁴⁹ The IAMP AAP makes provision for distribution activity on-site, albeit only where such activity is directly related to the Automotive and Advanced Manufacturing sectors

- As a consequence of the above, INEE consider the IAMP as a "key inward investment lever" in pitching the region to prospective occupiers and have already seen evidence of strong interest in the site from the advanced manufacturing and distribution sectors. In addition, INEE indicated that they expect this interest to continue moving forwards. This seems reasonable (subject to the availability of land and floorspace) given the IAMP's profile and the likely positioning of advanced manufacturing and logistics/distribution as key drivers of economic growth in the local area. Indeed, a review of key economic strategy documents highlights that:
 - A refresh of the NELEP's SEP was published in January 2022. The document outlines
 the NELEP's plan for growing and developing a more productive, inclusive, and
 sustainable regional economy.

The document outlines four areas of strategic importance, defined as those "clusters and industries which have the most potential to drive our ambitions and targets - in particular to deliver growth in our economy, higher quality jobs and productivity." Advanced manufacturing is identified as an area of strategic importance.

- 5.28 In addition, the SEP highlights transport, and logistics as one of three key enabling services. These enabling services are described as underpinning the economy and providing the potential for significant growth in higher value jobs.
 - The **South Tyneside Economic Recovery Plan** outlines a series of key interventions designed to support the Borough's recovery from Covid-19 and establish the conditions to underpin future growth.
 - Within the document, manufacturing is identified as one of three sectors (alongside construction and transport) which are viewed as being "key to maintain and grow in order to boost productivity." In total, fifty tailored action points are established to support the delivery of the Recovery Plan. These include:
 - i Placing South Tyneside at the forefront of the UK's offer to advanced manufacturing investors;
 - ii Re-skilling the Borough's workforce with a focus on areas of economic growth, including advanced manufacturing; and
 - iii Positioning the Port of Tyne and other key sites to maximise opportunities linked to growth in distribution/logistics

Current Live Enquiries

- 5.30 In addition to the above, Lichfields has been provided with a summary of live enquiries for space at the IAMP (as of September 2023). This information has been collated by Sunderland City Council's Economic Development Team.
- It is acknowledged that it is unlikely that the IAMP will be successful in landing all of these live enquiries. The data presented below does, however, serve as a useful indicator of the scale and nature of interest currently being directed to the site. It is also true that, without land of an appropriate size and location to offer to the market, the ability of Sunderland and South Tyneside (and the wider North East) to capture these opportunities would be significantly diminished. This is particularly relevant to those enquiries from the

automotive industry, where the IAMP offers the benefit of proximity to Nissan and the development of an emerging cluster.

5.32 Indeed, INEE indicated during discussions that whilst the IAMP was a key inward investment lever in general terms, the presence of Nissan as a major OEM makes the site "very important in pursuing opportunities in the automotive industry."

5.33 Furthermore, it is important to acknowledge that the data presented in the following paragraphs is likely to significantly underplay the scale of interest in the site to 2032 (the end of the current AAP period) and beyond. The enquiries listed generally relate to short-term opportunities. Indeed, data regarding the timescales for investment is only available for five of the thirteen potential projects and each is currently aiming to be on-site and operational no later than Q1 2026. Given the qualitative intelligence presented in the previous paragraphs/sections, it seems likely that these enquiries will be replenished by further waves of occupier interest in the longer term.

Sectoral Mix

In total, there were thirteen live enquiries for space at the IAMP as of September 2023. Approximately half (six) of these projects were directly linked to the automotive industry. This highlights both that: opportunities to attract additional investment from the automotive supply chain (as discussed above) remain; and the IAMP is viewed as an attractive location for prospective occupiers from the industry.

5.35 The remaining enquiries were from a mix of advanced manufacturing occupiers (including those from the defence sector) and logistics/distribution uses. This would appear to reflect the range of uses envisaged at the IAMP as set out in the evidence-based documents underpinning the current IAMP AAP.⁵⁰ It also supports INEE's view that these sectors will continue to express an interest in occupying space at the IAMP moving forwards.

Scale of Demand

Information regarding floorspace requirements is available for twelve of the live enquiries. In total, these projects could require between 340,690sq.m and 527,435sq.m, resulting in an average requirement of 28,390sq.m to 43,955sq.m. The top end of this range clearly exceeds the assumed range of 9,000sq.m to 37,000sq.m outlined in the IAMP AAP Commercial and Employment Technical Background Report.

5.37 This would appear to indicate - alongside the analysis of activity to date - that the evidence base which informed the current IAMP AAP understated the scale of individual requirements for space at the IAMP. Indeed, of the twelve enquiries considered, four (33%) correspond to requirements for more than 37,000sq.m. These range from 55,740sq.m to up to 135,000sq.m.

Employment Density

5.38 Information regarding both floorspace requirements *and* job creation impacts was available for five live enquiries. This information can be used to calculate an indicative employment

⁵⁰ The IAMP AAP makes provision for distribution activity on-site, albeit only where such activity is directly related to the Automotive and Advanced Manufacturing sectors

density for these projects. It should be noted that the five enquiries include: two from the automotive industry; two advanced manufacturers; and one logistics/distribution occupier. Whilst the sample is relatively small, it is, nevertheless, considered a reasonable reflection of the types of occupiers the IAMP is seeking to attract.

In total, the floorspace requirements associated with these enquiries are estimated at between 83,160sq.m and 125,615sq.m. The prospective occupiers anticipate that these projects could create 795 to 820 jobs in the event that they all come forward. Taken together, these figures correspond to an employment density range of between 105sq.m and 153sq.m per job - between two and three times higher than the 50sq.m per job figure assumed in the evidence-base underpinning the original IAMP proposition (Section 3.0). Taken together with the employment densities observed in relation to activity observed on the site to date (Section 6.0) this suggests that development at the IAMP is generally requiring more floorspace per job than originally planned for. The corollary of this is that in order to accommodate 7,850 jobs on-site (the level of employment growth tested at the IAMP AAP Examination) the IAMP will need to deliver more floorspace (and potentially more land) than originally anticipated.

6.0 Impact on Employment Land Needs

- 6.1 This section of the Position Statement benchmarks observed demand against the scale and format of development anticipated in the evidence base developed to inform the current IAMP AAP. Analysis is presented on the basis of three key metrics:
 - Scale of enquiries;
 - Employment densities; and
 - Plot ratios.
- This analysis is then used to arrive at a conclusion as to whether 392,000sq.m of floorspace and 150ha of development land remains sufficient to accommodate the 7,850 direct jobs that the IAMP is forecast to create.

Scale of Enquiries

- The IAMP AAP was developed having regard to a Commercial and Employment Technical Background Report. The report advises that individual occupiers at the site are likely to require units ranging in size from "9,000sq.m to 37,000sq.m, depending on the nature of operations."
- It is understood, based upon discussions with Council officers that the work was predicated on demand being driven by a re-shoring of supply chain businesses linked to the Qashqai and Juke models. As a result, the report assumed that future demand for buildings would be comparable to the scale of premises occupied by existing automotive supply chain businesses in the region.
- As outlined in Section 5.0, however, the need to develop EV battery manufacturing facilities at scale has resulted in a number of (consented or pending) planning applications for units at a much greater scale. This includes:
 - Envision AESC Plant 2: 108,615sq.m;
 - Additional battery manufacturing plant: 108,615sq.m; and
 - Battery packing facility: 70,000sq.m.
- The above schemes do not simply represent a modest shift in the overall range anticipated. The smallest of the units (at 70,000sq.m) is almost double the top end of the range envisaged by the evidence base underpinning the current IAMP AAP. The larger schemes exceed the upper bound of the range by a factor of 2.9.
- This shift towards demand for larger floorplate units does not, however, appear to be driven just by EV battery manufacturing. A review of current live enquiries at the IAMP (based upon data provided by Sunderland City Council) identifies four occupier requirements of more than 37,000sq.m. None of these enquiries are linked to EV battery manufacturing.
- In addition to the above, work undertaken to inform the IAMP Interim Position Statement (January 2022) considered the extent to which the market for large (1 million sq. ft or 92,903sq.m plus) industrial units had grown in the North East in recent years, with the analysis reproduced in Table 6.1. The document concluded that the data appeared to highlight a "marked increase in the delivery of larger units in recent years." Indeed, over a

period of more than 40 years (beginning in 1971) just four developments of this scale were recorded, whereas one development per annum was expected to come forward during the 5-year period 2019 to 2022. It should be noted that - as the table is taken from a November 2021 report - it excludes any recent development activity at the IAMP. This includes the Envision AESC Plant 2, which exceeds 1,000,000sq.ft (92,903sq.m).

Table 6.1 Development Activity: Large Industrial Units, North East England

Property Name	Location	Net Internal Area (sq.ft)	Net Internal Area (sq.m)	Year of Construction
Prudhoe Mill	Princess Way, Prudhoe	1,181,015	109,720	1971
Redcar Steelworks	Redcar Mill, Redcar	1,425,000	132,387	1979
Nissan Motor Manufacturing (UK)	Washington Road, Sunderland	3,561,507	330,875	1985
Tesco Import Centre	Tees Dock, Redcar	1,069,643	99,373	2009
Amazon Fulfillment Centre	A66, Darlington	1,508,367	140,132	2019
Amazon Fulfillment Centre	Tursdale Road, Durham	1,992,061	185,069	2020
NCL1 - Follingsby Max	Follingsby Lane, Gateshead	2,000,000	185,806	2021
Wynyard Logistics and Distribution Centre	Coal Lane, Billingham	2,013,766	187,085	2022

Source: CoStar (Q4 2021)/Lichfields analysis

Employment Densities

- As outlined in Table 3.2, the current IAMP AAP and the evidence base which underpins it assumed that development across all phases of the IAMP would come forward at an employment density equivalent to 50sq.m of floorspace per headcount job.
- Table 6.2 provides a summary of the employment densities achieved at the IAMP to date. This is based upon analysis of completed and pipeline developments where information regarding floorspace requirements and (headcount) staffing requirements are available. The analysis was provided to Lichfields by Sunderland City Council and indicates that development at the IAMP is currently coming forward at an average density of 77sq.m per headcount job. This level of floorspace per job is approximately 50% above that envisaged within the current IAMP AAP and supporting evidence.

Table 6.2 Observed Employment Densities

Occupier	Headcount Jobs	Floorspace (GIA sqm)	Employment Density		
Completed Development					
Unipres	1,200	44,120	37sq.m per headcount job		
SNOP	254	21,856	86sq.m per headcount job		
FALTEC	494	11,400	23sq.m per headcount job		
Development Pipeline					
AESC Plant 2	1,084	108,615	100sq.m per headcount job		
Battery Plant	775	108,615	140sq.m per headcount job		
Packing Facility	943	70,000	74sq.m per headcount job		
Total	4,750	364,606	77sq.m per headcount job		

Source: Sunderland City Council

- It can be seen from the table that this has been skewed at least in part by the impact of EV battery manufacturing facilities at the IAMP. These developments are characterised by large floorplates and (comparatively) modest levels of employment. To understand whether employment densities are likely to revert back to the figures assumed within the IAMP AAP in the medium-term, therefore, it is helpful to also consider data regarding current live enquiries for space at the site.
- As outlined in Section 5.0, information regarding floorspace and job creation impacts is available for five live enquiries. Figures in relation to both metrics are presented as a range, reflecting the fact that some enquiries are likely to be delivered using a phased approach. Total floorspace requirements are identified as being between 83,160sq.m and 125,615sq.m, whilst the direct employment impacts associated with these enquiries would range from 795 to 820 jobs in aggregate terms.
- It is possible, by adding this data to the 'observed' employment densities in Table 6.2 to calculate a series of blended average employment densities. These reflect the space utilisation rates recorded with respect to completed/pipeline development, as well as current occupier enquiries and are summarised below. This would appear to suggest that it is not unreasonable to expect employment densities at the IAMP to remain above the 50sq.m per headcount job assumed within the AAP:
 - Minimum floorspace (447,766sq.m) and employment (5,545 jobs) yields an employment density of 81sq.m per headcount job; and
 - Maximum floorspace (490,221sq.m) and employment (5,570 jobs) yields an employment density of 88sq.m per headcount job.

Plot Ratios

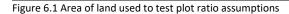
- The IAMP AAP allows for the delivery of 392,000sq.m of employment floorspace on 150ha of land. As set out in Section 3.0, this translates to a plot ratio of 0.26.
- 6.15 The following units have been delivered/are being constructed on site to date. These account for 153,342sq.m of floorspace (potentially rising to 165,496sq.m if the remaining 12,154sq.m of space consented at Faltec comes forward in due course):
 - SNOP: 21,856sq.m;

- Faltec: 11,400sq.m (potentially rising to 23,554sq.m);
- Unit 6: 11,471sq.m; and

6.16

• Envision AESC Plant 2: 108,615sq.m.

These units have been delivered on the area of land shown in Figure 6.1. This totals approximately 52.8ha and suggests that the plot ratio achieved at the IAMP to date has been in the order of 0.29 (rising to 0.31 if Faltec Phase 2 comes forward). The plot ratios observed to date are not, therefore, too dissimilar from those originally envisaged at the IAMP.





Source: Lichfields analysis

This is particularly true when one considers that the 52.8ha site area excludes the facilities listed below.⁵¹ These facilities have been delivered on land out with the site boundary shown in Figure 6.1 but will nevertheless make an important contribution to the success/ attractiveness of the floorspace included within the 52.8ha site:

- Parking for Envision AESC (located to the north west of the Faltec site): 1.1ha;
- Sub-station and other on-site infrastructure (located to the north of Unit 6): 1.1ha; and
- Planning application (pending) for a substation on-site: 8.6ha

6.17

⁵¹ These sites have been excluded from Lichfields' calculations they serve the wider site, rather than simply the area of land shown in Figure 6.1

- 6.18 These sites account for a further 10.8ha of land, which would see the plot ratios observed to date fall to between 0.24 and 0.26 in line with the assumptions which underpinned the evidence base for the current IAMP AAP.
- In addition, a further area of land has been brought forward to deliver a Smart Grid onsite. This is a unique facility, which provides occupiers at the IAMP with high power and a direct connection to the grid.

Future Development Needs

Floorspace

- As outlined above, the employment densities achieved at the IAMP to date translate to approximately 77sq.m of floorspace per headcount job some 50% higher than the level of floorspace per worker assumed in the evidence which informed the current IAMP AAP. Furthermore, a review of current live enquiries for space at the IAMP appears to suggest that employment densities will remain higher than originally anticipated.
- Previous work to assess the employment potential of the IAMP concluded that the site could attract 7,850 headcount jobs. At an employment density of 50sq.m per headcount job, a total of 392,000sq.m of floorspace would be required to accommodate this level of employment growth. This rises to 604,450sq.m if an employment density figure of 77sq.m per headcount job is applied to reflect recent development activity (and to a lesser extent occupier interest) at the site.
- To date, 333,496sq.m of floorspace has been delivered or granted planning consent at the IAMP, as outlined in Paragraph 5.4. In addition, Sunderland City Council officers have advised that a further planning application is anticipated in spring 2024. The application is expected to seek consent for a further 178,615sq.m of floorspace to allow the delivery of additional EV battery manufacturing capability and a battery packing facility (see Paragraph 5.5). In total, therefore, the 'pipeline' of floorspace to be delivered at the IAMP could be as much as 512,111sq.m. This assumes that all of the floorspace consented at Faltec is delivered in due course (otherwise the pipeline figure reduces to 499,957sq.m).
- In order to deliver the 604,450sq.m of floorspace that could be needed to accommodate 7,850 headcount jobs at the IAMP, there is a need to provide a further 92,339sq.m. This could rise to 178,689sq.m if a blended employment density of 88sq.m per headcount job is applied (to reflect both observed development and current live enquiries at the IAMP). The derivation of these figures is summarised in Table 6.3.

Table 6.3 Indicative estimate of residual floorspace need

a	Forecast job growth	7,850 headcount jobs		
b	Employment density	77sq.m per job 88sq.m per job		
c	Total floorspace need (a*b)	604,450sq.m 690,800sq.m		
d	Space delivered/consented	333,496q.m		
e	Pending application	178,615sq.m		
f	Total floorspace 'pipeline' (d+e)	512,111sq.m		
g	Residual floorspace need (c-f)	92,339sq.m	178,689sq.m	

Source: Lichfields analysis

Town End Farm

- 6.24 It is understood, based on discussions with Sunderland City Council officers, that the authority has been asked to provide pre-application advice on a possible planning application on land at Town End Farm. This site is located within the south east of the IAMP AAP boundary and is allocated for employment uses.
- 6.25 Council officers have advised that the site comprises of approximately 21ha of land for development and that the current proposals for the site allow for the delivery of approximately 90,000sq.m of floorspace. This level of floorspace provision would almost be sufficient to meet the lower bound of the residual need figures presented in Table 6.3.
- 6.26 It should be noted, however, that the development proposed would result in a significantly higher density of development, relative to the other parcels of land at the IAMP. Indeed, the delivery of 90,000sq.m of space on a 21ha site would correspond to a plot ratio of 0.43. This is considerably higher than the plot ratio assumed within the IAMP AAP (0.26) or the plot ratios achieved at the IAMP to date (estimated to be between 0.29 and 0.31). Should the land at Town End Farm come forward at a plot ratio of 0.26, the site would instead be capable of providing 54,600sq.m of floorspace.
- 6.27 Updating the data in Table 6.3 to take account of the floorspace that could be delivered at Town End Farm yields a residual floorspace need of between 2,339sq.m and 124,089sq.m

Table 6.4 Indicative estimate of residual floorspace need (less Town End Farm)

a	Forecast job growth	7,850 headcount jobs		
b	Employment density	77sq.m per job	88sq.m per job	
c	Total floorspace need (a*b)	604,450sq.m	690,800sq.m	
d	Space delivered/consented	333,496q.m		
e	Pending application	178,615sq.m		
f	Total floorspace 'pipeline' (<i>d</i> + <i>e</i>)	512,111sq.m		
g	Residual floorspace need (<i>c-f</i>)	92,339sq.m	178,689sq.m	
h	Potential floorspace at Town End	54,600sq.m		
	Farm	90,000sq.m		
i	Residual floorspace need allowing for Town End Farm $(g-h)$	37,739sq.m	124,089sq.m	
		2,339sq.m	88,689sq.m	

Source: Lichfields analysis

Development Land

6.29

In converting the residual floorspace need identified in Table 6.4 into a land requirement, it is necessary to apply an appropriate plot ratio. As outlined in Paragraph 3.18, the IAMP AAP is underpinned by a plot ratio of 0.26. The plot ratios that have been achieved on-site to date are broadly in accordance with this figure. Paragraph 6.16 identifies a plot ratio of 0.29, rising to 0.31, albeit further analysis (see Paragraph 6.17) suggests that these figures could be slightly overstated.

Table 6.5 considers the impact of applying two alternative plot ratios to the residual floorspace need derived in Table 6.4. This shows that a requirement for a further 2,339sq.m of floorspace could translate to a need for 0.8ha to 0.9ha of land. This rises to between 42.8ha and 47.7ha on the basis of a residual floorspace requirement of 124,089sq.m.

Table 6.5 Indicative estimates of residual land need

Residual floorspace	Plot Ratio		
need	0.26	0.29	
2,339sq.m	o.9ha	o.8ha	
37,739sq.m	14.5ha	13.0ha	
88,689sq.m	34.1ha	30.6ha	
124,089sq.m	47.7ha	42.8ha	

Source: Lichfields analysis

6.30 Clearly, any decision regarding the level of floorspace and land to be planned for at the IAMP is a policy matter for the relevant local authorities to determine. It is acknowledged, however, that the top end of the range presented in Table 6.5 is most likely to help to guard against the risk of the economic potential of the IAMP being constrained due to a lack of available development land/floorspace for occupation.

7.0 Accommodating Additional Land Needs

- The IAMP AAP makes allowance for the delivery of 392,000sq.m of employment floorspace on 150ha of land. As outlined within Section 6.0, however, this is no longer sufficient to accommodate the anticipated employment growth potential of the site (7,850 jobs over the period to 2032) having regard: to the scale of individual occupier requirements; and floorspace utilisation rates observed at the site.
- 7.2 The following paragraphs consider the options available to meet this demand. The starting point for this is to consider available sites which already benefit from a planning allocation/permission.

Available sites in the immediate locality

- 5.3 Stakeholder consultation has identified proximity to Nissan as the key factor in bringing forward land capable of attracting additional investment from the automotive industry to the North East. This is supported by analysis presented in various evidence-based documents which fed into the current IAMP AAP, as summarised below:
 - The IAMP AAP Commercial and Employment Technical Background Report highlights the importance of proximity, advising that this reflects the operational model of automotive manufacturers such as Nissan, which depend upon: "late material sequencing to build complex products with unique vehicle combinations in the millions. This is only possible with key suppliers located very close to the final assembly plants, which puts a premium on the availability of development land nearby as remote sites do not offer the same advantages."
 - Part 2 of the Site appraisals for South Tyneside Council and Sunderland City Council (2013) advises that: "closeness to Nissan has been identified as a key criterion, as many though not all of the development needs identified for the NAMP [now the IAMP] in the Demand Study are linked to Nissan's supply chain. Clustering these industries offers the best chance of attracting new occupiers."
- Based upon the above intelligence it is considered that a sensible starting point in considering how to meet additional floorspace/land needs is to explore the availability of land located close to Nissan and the existing IAMP site. In the first instance, Lichfields has considered sites in the Washington, Follingsby, Monkton, Boldon locality. This area widely acknowledged as a market hotspot surrounds the IAMP site and straddles the local authority boundaries of Sunderland, South Tyneside and Gateshead. As such, the Employment Land Reviews for all three Councils have been reviewed to understand the availability of land in this locality. A minimum site threshold of 30ha has been applied.
- No employment sites of 30ha or more are recommended for retention/allocation in the Washington, Follingsby, Monkton, Boldon area, other than the land that remains available at the IAMP and an area of safeguarded land. The safeguarded land is designated within the Sunderland Core Strategy and Development Plan and is located immediately adjacent to the IAMP (see Figure 7.1). The land is safeguarded under Policy SS3, which does not specify a particular end use for the site. As such, this land could theoretically be made available to accommodate future employment land needs associated within the IAMP and it should be noted that approximately half of this area is designated as part of the North East

Investment Zone (see Figure 1.1). The site can only be released for development through a review of the Council's Plan, however.

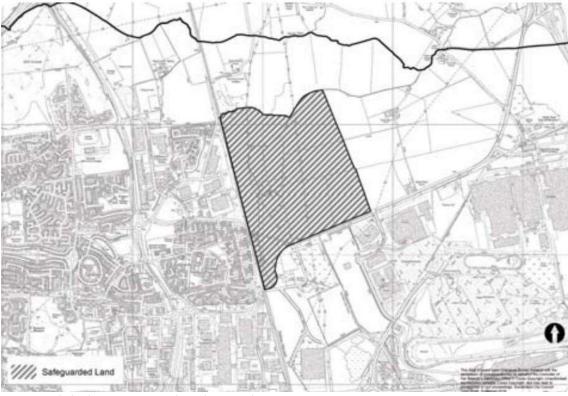


Figure 7.1 Safeguarded Land Adjacent to the IAMP

Source: Sunderland Core Strategic and Development Plan

More generally, the supply of employment land in this locality (across sites of all sizes) is recognised as being tight. This is acknowledged within South Tyneside Council's 2023 Employment Land Review, with the key points summarised in Table 7.1. It can be seen from the table that the supply of available employment land in Washington corresponds to less than six years of past take-up. This falls to just two years in Boldon/Cleadon, with no land available in Monkton/ Wardley.

Table 7.1 Implied Supply by Market Area

Location	Implied Supply	Comments
Follingsby	Low	"The Gateshead ELR recommended that Gateshead Council assess the feasibility of bringing forward additional employment land to the south of the Follingsby Primary Employment AreaThis 25 hectare site was subsequently removed from the Green Belt and was developed out by Amazon as a fulfilment centre (in 2020)."
Boldon/ Cleadon	2 years	Based on a supply of 0.60ha and an average annual take-up rate of 0.27ha (2002-21).
Monkton/ Wardley	o years	Based upon a supply of oha and an average annual take-up rate of 0.79ha (2002-21).
Washington	<6 years	"By the start of 2020, the implied supply in Washington had reduced to 6 yearsConstruction (in 2022) of four industrial units at Turbine Business Park and seven units at Hillthorn Business Park will further reduce the supply of employment land in Washington."

Source: South Tyneside Employment Land Review (2023), Paragraph 6.13 and Table 6.6

Available sites in County Durham, Gateshead, South Tyneside and Sunderland

- In considering the potential of existing employment land to meet additional demand at the IAMP, the next logical step is to explore the availability of land in Sunderland/South Tyneside more widely as well as the neighbouring authorities of Gateshead and County Durham. As above, a review of each authority's latest Employment Land Review has been conducted to identify any sites of more than 30ha (net developable area) that have been recommended for retention/allocation for employment uses.
- 7.8 With the exception of the IAMP site itself (and the adjacent safeguarded land as discussed above), this exercise highlighted the following sites:
 - South of Bowburn Road, Tursdale, County Durham (EMP5): 44.3ha (with a further 62.0ha safeguarded beyond the Plan period);
 - NETPark, County Durham (EMP150): 13.5ha (with a further 17.7ha safeguarded beyond the Plan period);
 - Forrest Park, County Durham (EMP154): 50.9ha; and
 - Tyne Marshalling Yards, Gateshead (G190): 34.8ha.
- 7.9 No sites of 30ha or more were identified within the local authorities of Sunderland and South Tyneside (with the exception of the IAMP).
- 7.10 The suitability of these sites as well as safeguarded land adjacent to the IAMP is considered in Table 7.2. The criteria applied within the table have been identified having regard to the IAMP AAP Commercial and Employment Technical Background Report. This

document explores the key criteria for identifying the original IAMP site. These can be summarised as follows:

- Site size (already dealt with through application of a minimum size threshold);
- Proximity to Nissan;
- Access to a skilled workforce;
- Ability to transport goods nationally (access to the strategic road network) and internationally (port/airport access); and
- Site availability (including barriers to development) and compatibility of surrounding uses.
- The above criteria have been discussed and agreed with stakeholders. Furthermore, they align with the site assessment work summarised in Part 2 of the Site appraisals for South Tyneside Council and Sunderland City Council. The document categorised criteria according to their importance and the above list reflects those considered as being of High or Medium importance.
- Information regarding the proximity of each site to Nissan and port/airport facilities has been obtained by Lichfields (using GoogleMaps' 'route planner' function). Information relating to access to labour, strategic road access, barriers to development and compatibility of surrounding uses has been taken from site assessment work undertaken as part of each authority's Employment Land Review.
- The safeguarded land adjacent to the IAMP has also been considered as part of this exercise. It should be noted that the safeguarded land was not assessed as part of the Sunderland Employment Land Review (ELR). As a result, information from the South Tyneside Employment Land Review, has been used to populate this section of the table with proxy values. The South Tyneside Employment Land Review assessed the following parcels of land at the IAMP: -
 - IAMP South (north of Nissan);
 - IAMP South (north west corner); and
 - IAMP North.

Table 7.2 Assessment of potential employment sites

	South of Bowburn Road, Tursdale	NETPark	Forrest Park	Tyne Marshalling Yards	Safeguarded Land at The IAMP
Proximity to Nissan	17.3 miles	22.0 miles	28.5 miles	7.8 miles	<1.0 mile
	26 min drive-time	34 min drive-time	36 min drive-time	18 min drive-time	<5 min drive-time
Proximity to Port	16.6 miles	21.7 miles	23.4 miles	10.4 miles	5.0 miles
	33 min drive-time	42 min drive-time	42 min drive-time	31 min drive-time	12 min drive-time
Proximity to Airport	18.4 miles	13.0 miles	11.1 miles	12.4 miles	15.2 miles
	27 min drive-time	20 min drive-time	19 min drive-time	20 min drive-time	34 min drive-time
Access to Labour	4	4	4	N/A	N/A
Strategic Road Access	5	4	5	N/A	5
Barriers to Development	Western parcel requires crossing over Leamside Line	None	None	N/A	N/A
Compatibility of Surrounding Uses	Industrial/ Distribution	Light industry/R&D	Industrial/ Distribution	N/A	5

Source: Employment Land Reviews / Lichfields analysis

NB: Appendix 1 provides a summary of the scoring system applied (in each authority's ELR) to the site assessment process

The analysis (as well as further intelligence not captured in Table 7.2) does not identify any available sites in the surrounding local authority areas that are particularly well placed to accommodate any residual demand associated with the IAMP. Site-specific considerations are outlined for each location in the bullet point list below. In addition, it can be seen from the table that safeguarded land adjacent to the IAMP outperforms the other potential sites with respect to key criteria such as proximity to Nissan and proximity to a port, as well as (the less important criteria of) proximity to an airport. Land at the IAMP also performs well with respect to strategic road access and the compatibility of surrounding uses:

• South of Bowburn Road, Tursdale: a significant proportion of the 44.3ha allocation has now been developed out (see image below). Whilst a further 62.0ha of site is safeguarded for beyond the Plan period, it is understood that this requires a crossing over the Leamside Line to unlock the land for development. In addition, whilst the site benefits from good strategic road access and access to labour and is suitable for industrial uses, it is not particularly well located to the IAMP or regional port/airport facilities;

7.14



Figure 7.2 Latest aerial of South of Bowburn Road

Source: www.integra61.co.uk

• NETPark: site assessment work undertaken as part of the County Durham Employment Land Review concludes that NETPark would be best suited to light industrial/R&D uses. Moreover, Policy 2 of the County Durham Plan allocates NETPark as a Specific Use Employment Site to meet demand for "uses within use class B1, specifically for Research and Development only." Plans for NETPark Phase 3 on 26 acres of land have been approved by Durham County Council Cabinet, who have agreed to invest £61m in the delivery of new laboratory, office, production and storage space. This would reduce the availability of land and demonstrates that the authority are focussed on pursuing target markets which do not align well with the sectoral focus of the IAMP.

As with South of Bowburn Road, the site benefits from good strategic road access and access to labour. It is not, however, particularly well located to the IAMP or regional port/airport facilities.

- Forrest Park: it is understood that an outline planning consent is in place to deliver 1.7m sq.ft. (157,935sq.m) of floorspace for logistics, manufacturing, trade and roadside uses. ⁵³ Whilst the site benefits from good strategic road access and access to labour, it is not particularly well located to the IAMP or regional port/airport facilities.
- Tyne Marshalling Yards: Paragraph 4.13 of Gateshead Council's Making Spaces for Growing Places Local Plan Document advises that the site is located within a "strategically important Green Belt gap". The site is allocated under Policy MSGP5, which states that rail-related uses will be supported on the site, provided that:
 - i The rail-related uses cannot be satisfactorily accommodated on a site which serves the NELEP area and is not in the Green Belt;

⁵² Source: www.northeasttechnologypark.com

⁵³ Source: www.forrestpark.co.uk

- ii Very special circumstances supporting rail-related development clearly outweigh the harm to the Green Belt;
- iii Improvements to the road access and junction on to Lamesley Road are secured; and
- iv Proposals include a strong landscape framework.
- The above analysis demonstrates that there are no existing allocations in the local area that represent an obvious candidate to accommodate residual demand associated with the IAMP. It is considered that the most appropriate potential solution, therefore, would be to bring forward safeguarded land adjacent to the IAMP. This would support the continued development of an automotive cluster. As outlined in previous evidence base documents, proximity to Nissan is a key criterion in identifying sites to attract automotive occupiers. The importance of this has crystallised in recent years, with trends such as the shift to electrification and greater customisation as well as exogenous factors such as the need to comply with the Rules of Origin clause creating further demand from the industry for localised supply chains. The designation of some of this safeguarded land as part of the North East Investment Zone also means that future occupiers would benefit from a range of fiscal incentives, helping to enhance its appeal to new investors.
- In addition, the IAMP is able to offer occupiers direct access to power at scale as a result of an on-site microgrid. This is a significant benefit when competing for investment from energy intensive occupiers. It is understood that the need to achieve connections to the national grid in other locations could result in significant delays to development.

8.0 Summary

- 8.1 The IAMP AAP⁵⁴ allows for the delivery of 392,000sq.m of floorspace on 150ha of land. This was based on a moderate growth scenario initially constructed in 2013. Since the evidence base for the IAMP was developed (and tested by an Inspector) the automotive industry has evolved to respond to factors such as:
 - An acceleration in the shift towards electrification and customisation, which has impacted on supply chains - creating new opportunities and a renewed emphasis on just-in-time processes; and
 - The need to respond to changes in the UK's trading relationship with the EU. In particular, the introduction of the Rules of Origin Clause, which has led many commentators to conclude that the development of domestic battery production is critical to the continued success of the UK automotive industry.
- As a result of the above, development activity observed at the IAMP to date has not fully aligned with the scale and format of demand that was anticipated when the IAMP AAP was drafted and examined by an Inspector. The key differences are summarised below and mean that more floorspace and land is likely to be required at the IAMP to accommodate a given level of employment growth:
 - The size of individual occupier requirements: the IAMP AAP was developed to respond to requirements ranging in size from 9,000sq.m to 37,000sq.m. A number of consented/pending planning applications and live enquiries at the IAMP relate to units that are more than double this size; and
 - The ratio of floorspace to employment: the IAMP AAP (and underlying evidence-base documents) assumed that development at the site would come forward at an employment density of 50sq.m per job. Development on the site to date has taken place at a density of 77sq.m per job (rising to 88sq.m per job if live enquiries are also taken into account).
- 8.3 The IAMP AAP allowed for employment growth of 7,850 jobs at the IAMP a figure that was tested at Examination in Public and endorsed by the Inspector. It is not the purpose of this Position Statement to test this figure or generate revised estimates of the IAMP's employment generating potential. Nevertheless, it is considered that the IAMP is capable of driving significant growth in employment as a result of those factors listed below:
 - The scale of opportunity associated with the automotive industry's shift to
 electrification and additional growth linked to an increasing emphasis on vehicle
 customisation;
 - The strategic importance of the IAMP to the future of UK automotive (due to its proximity to the UK's most productive car plant and its status as the location of the only EV battery gigafactory in Britain);
 - The economic importance of the advanced manufacturing and distribution sectors⁵⁴ at the North East Local Enterprise Partnership (NELEP) level; and

⁵⁴ The IAMP AAP identifies floorspace to accommodate production, supply chain and distribution activities related to the automotive and advanced manufacturing sectors

- The scale of occupier interest in land/premises at the IAMP. This will be strengthened by the site's Investment Zone status, providing new occupiers/investors with access to a range of fiscal incentives.
- Having regard to likely pipeline of floorspace delivery at the IAMP and the employment densities being achieved on the site it is estimated that up to 47.7ha of additional land could be required to accommodate 7,850 jobs. This is in addition to the 21ha of land available (and allocated) for development with the IAMP AAP boundary at Town End Farm.

Appendix 1

1.1 Table 7.2 of the main report considers available sites of more than 30ha in the local authorities surrounding the IAMP. This appendix provides a summary of the criteria applied by each authority's employment land evidence base in appraising the sites included in the table. It should be noted that only those criteria captured in Table 7.2 are reproduced in the following paragraphs.

County Durham

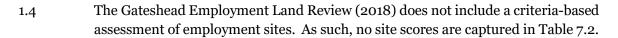
- 1.2 Appendix 2 of Durham County Council's Employment Land Review Update (2018) includes an overview of the approach to scoring applied to the site assessment exercise. The key points with respect to the metrics captured in Table 7.2 are summarised below:
 - Strategic access: sites were scored on a scale of 1 to 5 where:
 - i 5 = very good: within 5 km of strategic road junction (A1M or A19) via good unconstrained roads
 - ii 3 = average: within 7.5 km of strategic road junction(A1M or A19) via good unconstrained roads
 - iii 1 = poor: over 10 km from junction/access, and/or through constrained/local roads, and/or though town centre or residential areas etc
 - **Proximity to urban areas and access to labour & services**: sites were scored on a scale of 1 to 5 where:
 - iv 5 = very good: near town, district centre (i.e. within 1km) good pedestrian access to residential areas and public transport connections (i.e. on a regular bus route to residential areas and in close proximity to a bus/rail stop)
 - v 1 = poor: remote site, no services or residential areas nearby (i.e. over 5km away)

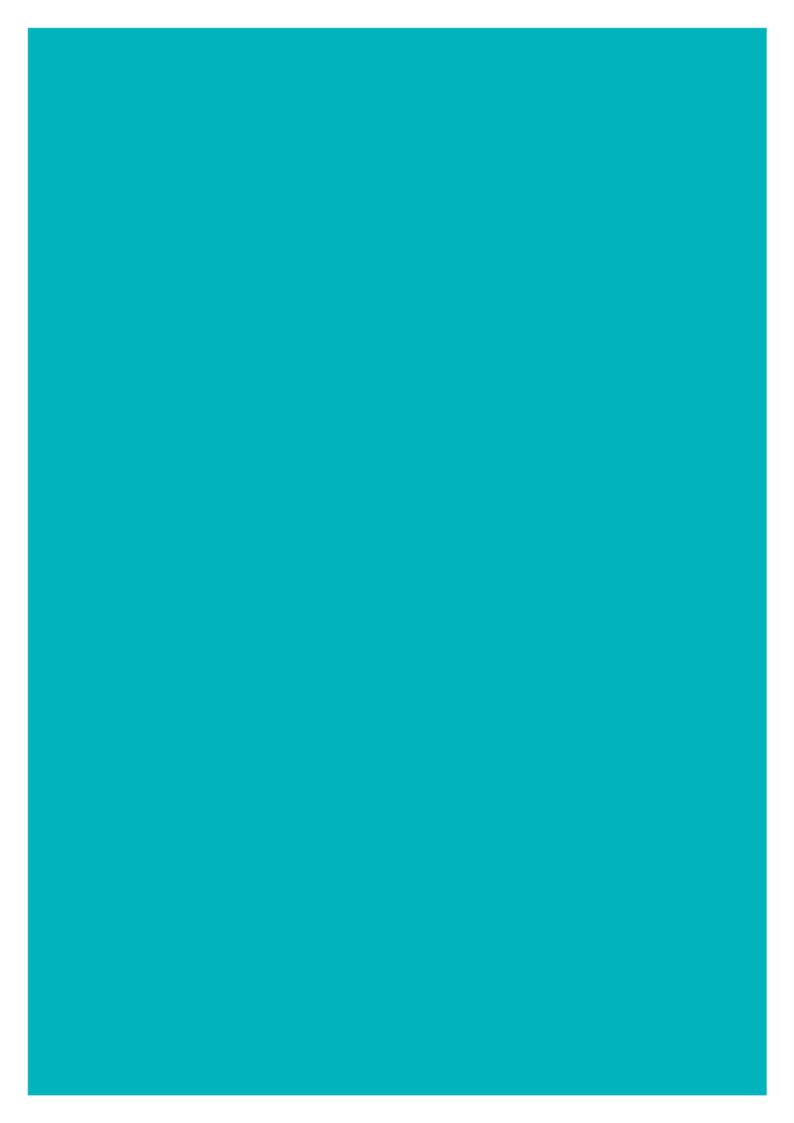
South Tyneside

- 1.3 Appendix 4 of South Tyneside Council's Employment Land Review (2023) provides an overview of the approach to scoring applied to the site assessment process. The key points with respect to the metrics captured in Table 7.2 are summarised below:
 - Access to strategic highway network: sites were scored on a scale of 1 to 5 where:
 - vi 5 = within 2 km of strategic highway network via unconstrained roads
 - vii 3 = within 2 km of other dual carriageway via unconstrained roads
 - viii 1= over 2 km from dual carriageway
 - Compatibility of adjoining uses: sites were scored on a scale of 1 to 5 where:
 - ix 5 =located within larger employment area with no incompatible land uses
 - x 3 = office uses adjoining residential areas

xi 1 = industrial (manufacturing/warehousing) uses adjoining residential areas on more than one side

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