Strategic Planning Research Unit
A specialist team within DLP Planning Ltd

For and on behalf of
Copeland Borough Council

COPELAND ECONOMIC DEVELOPMENT NEEDS ASSESSMENT

Prepared by
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0.0 EXECUTIVE SUMMARY

0.1 DLP Planning were appointed by Copeland Borough Council to undertake an Economic Development Needs Assessment (EDNA). The objective of the study is to identify future economic and employment growth needs across Copeland for the period covering 2021 to 2038. This EDNA will provide a robust and up to date evidence base which will inform the development of the emerging Copeland Local Plan.

0.2 The EDNA provides an assessment of Copeland's economy, investigating the economic potential of the Borough and identifying realistic yet aspirational growth scenarios based on economic forecasts and modelled scenarios for the delivery of future growth. It then assesses the future quantum and type of employment land which will be required in Copeland over the Plan period to support the levels of identified growth. This planned approach to delivering future employment requirements will ensure communities in the Borough have access to jobs and the employment scenarios in this study have considered local needs and growth requirements.

0.3 The EDNA considers current and future economic growth and employment land needs. It does not provide an assessment of Copeland's employment land supply to meet this demand. The EDNA has been prepared in accordance with the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG).

a) Functional Economic Market Area (FEMA)

0.4 Planning Practice Guidance (PPG) sets out that authorities should identify the Functional Economic Market Area (FEMA) and provides the following guidance on how this should be undertaken:

"Since patterns of economic activity vary from place to place, there is no standard approach to defining a functional economic market area, however, it is possible to define them taking account of factors including:

- *extent of any Local Enterprise Partnership within the area;*
- *travel to work areas;*
- *housing market area;*
- *flow of goods, services and information within the local economy;*
- *service market for consumers;*
- *administrative area;*
- *catchment areas of facilities providing cultural and social well-being; and*
- *transport network."*

0.5 The assessment to define the FEMA has considered a wide range of existing reports and data. The key findings for each element considered are summarised below:

- Commuting – there is a high proportion of people living and working in Copeland suggesting self-containment. Whilst there are moderate commuting flows to/from Allerdale, the self-containment rate of Copeland is still higher than that of Copeland and Allerdale combined.
- Travel to Work Areas (TTWAs) – ONS define a TTWA that follows exactly the local planning authority boundary.
- LEP areas – the Cumbria LEP covers Copeland, Allerdale, Barrow-in-Furness, Carlisle, Eden, and South Lakeland. An evidence review of each local authority

identifies that there are some links with Allerdale with regard to an allocated employment site on the border of Copeland.

- Transport links – a review of the existing and planned transport links found that Copeland strongest transport links were with Allerdale, however generally, the transport links are poor across Cumbria.

0.6 Overall, the evidence suggests that Copeland can be defined as a standalone FEMA. This corresponds with the findings of the 2019 Copeland Borough Council Economic Development Needs Assessment.

0.7 The guidance which suggests FEMAs should be 'best fit' to the local authority boundaries. This suggests that thee only realistic alternative would be to consider a FEMA covering Copeland and Allerdale. This has been considered due to the established transport links between the two boroughs and the potential future links relating to the planned expansion at the Lillyhall Industrial Estate in Allerdale close to the border with Copeland. However, the evidence relating to commuting patterns and self-containment rates for both areas supports two self-contained FEMAs covering Copeland and Allerdale rather than a joint FEMA.

0.8 Furthermore, while only anecdotal at this stage, the Covid pandemic has resulted in increased levels of home-working in Copeland, suggesting a further increase in the commuting self-containment rate in Copeland since the publication of the 2019 study and the latest TTWA data.

b) Economic Baseline

0.9 Copeland's local economy currently supports around 35,900 jobs, and has seen strong economic growth since 2009 whereby productivity (GVA per head) exceeds the Cumbria and North West levels.

0.10 The business demography in Copeland is broadly in line with national, regional, and county proportions. In Copeland, the majority of businesses are small businesses with between 0 and 9 employees at 85.49% which is very slightly higher than the Cumbria, North West, and National levels.

0.11 Copeland has particularly high proportions of jobs in the Manufacturing sector, accounting for 33.36% of jobs of which 83% are at Sellafield, compared to 7.78% nationally. Another sectoral strength is agriculture, forestry and fishing with 4.17% in this sector, this is lower than the Cumbrian average at 5.45% but notably higher than the North West and English average at 1.09% and 1.31% respectively.

0.12 Other sectors with relative local strengths are the Professional, scientific and technical sector and the Business administration and support services sector which both have relatively strong representation in Copeland compared to the Cumbria average. This represents the higher concentration of businesses in these sectors within the Sellafield supply chain. However, Copeland has a lower LQ in these sectors compared to the England average, due to the strong representation of these sectors within England's major cities.

0.13 The Construction sector is strong in Copeland relative to both the region and the national rate. This is strongly driven by specialist construction activities related to Sellafield.

0.14 However, the sectors relating to hospitality and tourism – the Accommodation & food services sector, Retail sector, and the Arts, entertainment, recreation sector – all have low representation compared to regional and national rates.

c) Commercial Market Signals and Completions Trends

0.15 A detailed qualitative and quantitative assessment of Copeland commercial property market has been undertaken. The first part provides a qualitative assessment based on stakeholder

engagement. The second part provides a quantitative assessment based on a range of data sources and monitoring data. The final part of this section looks at the future employment land requirement for each authority based on a past completions trend and interprets this in the context of the commercial market signals.

0.16 With regard to industrial floorspace in Copeland, there is a vacancy rate of 0.72%, this is very low considering a healthy rate is generally 7.5%. However, as this assessment was undertaken during the covid-19 pandemic whereby there was restrictions in place, many decisions on moving business premises have been put on hold and thereby reducing the vacancy rate. There was also a low rate of industrial floorspace growth per annum at 0.59% which falls below the 1% generally considered healthy. However, as was found in the qualitative assessment this is likely as a result of viability issues constraining the delivery of industrial floorspace. Taking the losses and completions into consideration, there has been a net loss of industrial floorspace of 3,623 sqm.

0.17 Office floorspace in Copeland has a healthy vacancy rate of 8.99%, above the generally considered healthy rate of 7.5%. There has also been a growth in office floorspace in the borough of 1.41% which is above the 1% healthy benchmark. Consequently, taking the losses and completions into account, there has been a net increase of office floorspace of 4,252sqm.

0.18 An estimate of the future requirements in Copeland for the plan period has been developed based on the trend of past completions. This identifies a need for 9.39 ha of employment land for the period 2021-38: around 4.49ha for office uses, 2.93ha of B2 industrial, and 1.97ha of B8 warehouse/distribution.

0.19 However, it should be noted that this is based purely on past completions trends for the pre-Covid period and does not account for changes in the market following Covid-19. This is one way to estimate future employment land needs and should be considered against the labour demand forecasting approaches.

d) Future Economic Growth

0.20 Three baseline economic forecasts for Copeland have been considered: from CE, OE, and Experian. At a headline level the forecasts provide a range of jobs growth outputs ranging from a growth of 700 jobs (0.1% growth per annum) in the Experian forecast, -400 jobs (-0.1% per annum) in the CE forecast, and -3,600 jobs (-0.6% per annum) in the OE forecast. Growth for all forecasts and all periods is lower than that seen in Copeland over the last 'trough to trough' period 2011-21 (1.0-1.4% per annum).

0.21 The major difference between the Experian and the CE forecasts is largely due to the size of the post-Covid bounce expected in each forecast with Experian forecasting a pronounced bounce while CE shows a very dampened effect. Conversely, the OE forecast is considerably more negative, despite also showing a pronounced bounce, the forecast expects considerable long-term decline across a wide range of sectors.

0.22 In terms of sectoral growth, all forecasts are significantly affected by forecast losses in the manufacturing sector with Experian forecasting losses of 1,500 in the sector, CE forecasting -2,400 losses, and OE -2,900 losses. However, analysis of the underlying data shows that 90-100% of these losses are modelled to be at the Sellafield site and while these levels of forecast losses reflect the broader performance of that sector at a national and regional level, they do not reflect the future plans for Sellafield Ltd. Therefore an adjustment to the manufacturing sector has been made to account for this.

0.23 Considering the other sectors besides manufacturing in the forecasts, shows that the CE and Experian forecasts show similar levels of growth for Copeland to 2038 and both show growth in the professional and business support, government services, and accommodation and

food services sectors.

0.24 However, the OE forecast is considered to provide a less suitable basis for positive planning in Copeland. This is due to the OE forecast being considerably more negative across a wide range of sectors and stands in contrast to the CE and Experian forecasts. Applying an adjustment to the manufacturing sector in the OE forecast still results in an overall negative forecast, compared to the CE and Experian forecasts which show positive growth.

Table 1. Baseline Scenarios – Including Adjustments to Manufacturing, 2021-38

	Jobs Growth	Growth Rate
CE (manufacturing adjusted)	1,100	0.2%
Experian (manufacturing adjusted)	2,200	0.4%

0.25 The forecasts consider a 'business as usual' case, whilst taking account of macro-economic factors such as Brexit and Covid they do not however take account of transformative pipeline projects which will have a significant impact on future jobs growth in Copeland. These factors are considered in the Growth Scenario set out below.

e) Growth Scenarios

0.26 Five growth scenarios have been developed which consider future policy interventions, initiatives, and pipeline projects which could see future economic growth in Copeland deviate away from the baseline forecasts. The scenarios considered are:

a) Sellafield Off-Siting – Sellafield is currently undergoing a process of rationalising its operational activity on site and relocating existing on-site workers to alternative locations. This will not impact on the number of workers, but will impact on the demand for employment land in the borough beyond the Sellafield site.

b) Increased capture of Sellafield's supply chain – a number of Council and LEP initiatives are aimed at increasing the level of jobs within Sellafield's supply chain which are retained within Copeland. This scenario considers the impact these might have on job growth and employment land needs.

c) Cumbria Clean Energy Park – considering the employment impacts of the development of an energy hub around the Moorside site. This primarily focusses on the direct and indirect jobs arising during the construction phase of a large scale nuclear power station for the purposes of this study, although it is recognised that other opportunities exist on the Clean Energy Park.

d) Woodhouse Colliery – considering the employment impacts of the development of a new coal mine. Considers the direct and indirect jobs during the construction and operational phases.

e) North Shore development – this development is tied into the growth of a number of initiatives focussed around the development of a big data campus and/or AI cluster which could see growth beyond that seen historically in Copeland.

0.27 The five Growth Scenarios set out above consider the local employment implications of five future development scenarios. Given the nature of these projects, there is considerable uncertainty as to which, or indeed if any, are to proceed within the Plan period.

0.28 In order to not prejudice this, the Growth Scenarios have therefore been set out as discrete scenarios with jobs growth figures attached to each. This will allow the Council maximum flexibility to plan for future jobs growth depending on which pipeline projects come forward. This notwithstanding, Table 2 provides a summary of the employment implications of each

of the Growth Scenarios.

0.29 The overall jobs growth figures for each of the Growth Scenarios are set out in the table below. Note that for the Clean Energy Park the jobs associated with the construction phase are considerably higher than the operational phase and so the level of employment peaks in 2035 and then declines towards the end of the Plan period. For Sellafield off-siting there is no additional employment, but 1,364 existing jobs at the Sellafield site will be relocated within Copeland.

0.30 In total all of the Growth Scenarios combined equate to additional employment growth of 4,923 jobs in Copeland by 2038. This includes new direct jobs at the Clean Energy Park and Woodhouse Colliery as well as jobs in the wider supply chain which would take place at a range of B Class employment, and non-B Class sites.

0.31 The increase in annual growth rate for each scenario has been calculated comparing each scenario individually against the growth rate of growth shown in the Experian forecast (with adjustment for manufacturing) which shows a growth rate of 0.4% per annum. This shows that over the period to 2038 the sum of the Growth Scenarios results in an average annual growth rate of 0.7% over the Experian forecast, meaning a 1.1% growth rate per annum. This is commensurate with Copeland's employment growth seen over the 2011-21 period which was around 1.0-1.4% per annum.

Table 2. Employment Growth – Growth Scenarios 2021-38

Project	Employment Growth 2021-38	Increase in Annual Growth Rate
Sellafield Off-Siting	No additional employment, 1,364 relocated	0%
Sellafield Supply Chain	2,762	0.4%
Clean Energy Park	3,123 at peak employment in 2035	0.6% pa to 2035
Woodhouse	1,038	0.2%
AI Campus	327	0.05%
All Growth Scenarios	**4,923**	**0.7%**

f) Risks of Brexit and Covid

0.32 Analysis has been undertaken to identify the scale of risk due to Brexit and Covid in the current sectoral profile of Copeland and in the jobs growth forecasts for Copeland over the period 2021-38.

0.33 This analysis shows that currently only 16% of jobs in Copeland are in the high-risk sectors. Over half (57%) of jobs in Copeland are in the moderate-risk due to Brexit (with a significant quantum due to jobs at Sellafield), while 27% are in low-risk sectors. Looking forwards, the level of jobs growth in the forecasts[1] differs dependent on the forecast. The CE and Experian forecasts both show a considerable quantum of growth in high-risk sectors – principally the Accommodation and food service sector – with Experian also showing greater growth in the Low and Medium Risk sectors. OE shows significant job losses in all risk categories – reflecting OE's more negative outlook due, in part, to Brexit. The vast majority of growth shown in all the elements of the Growth Scenario fall within the Moderate risk categories with very little in the high-risk category.

0.34 Overall, this analysis suggests that the majority of existing jobs within the Copeland economy

[1] Adjusted to account for discrepancies in the Manufacturing sector

are not considered to be at high-risk of negative consequences of Brexit. However, the CE and Experian forecasts do indicate significant growth in Accommodation and food service sector which is high risk and is also at high risk due to the impacts of Covid.

0.35 Similarly, the sectoral analysis for Covid indicates that for current jobs in Copeland only 11% are in the high-risk sectors, 50% in moderate-risk sectors, and 39% are in low-risk sectors. For the forecast jobs growth, all of the other forecasts show the majority of future jobs growth is in the Low-risk sectors. The OE forecast shows an overall negative jobs growth over the period which means it is not possible to do a meaningful proportional analysis.

0.36 As with the Brexit risk analysis, the relatively high growth forecast in the Accommodation & food services sector in the CE and Experian forecasts means a relatively high proportion of growth in these forecasts is in the high-risk category. The Growth Scenario shows the majority of growth is in the low-risk category.

0.37 The lockdown has had an impact on remote working patterns, particularly for office-based professions. It has demonstrated that it is a viable option for many and has removed many of the barriers to home working such as technology and corporate culture. While it is unlikely that the remote working patterns which have arisen as a result of COVID will pertain long-term, the levels of remote working for office workers are likely to increase following the pandemic.

0.38 However, this is more likely to take the form of increased levels of flexible working – i.e. office workers sharing their workdays between home and the office but working an increased number of days from home than pre-pandemic – rather than a significant increase in the number of workers who work exclusively from home.

0.39 Flexible working still requires businesses to retain a considerable quantum of office floorspace, although businesses are exploring how they can rationalise their space usage to minimise wasted space. This will likely lead to a greater proportion of office space being used for hot desking and touch down space.

0.40 Overall, this means the impacts of the changes to remote working will likely be less dramatic than indicated by the peak lockdown figures. This notwithstanding, even the continuation of the pre-covid trend shows a considerable increase in the levels of home working by 2038.

g) Future Employment Land Needs

0.41 This section considers the level of employment land needed to support the level of employment growth shown in the CE and Experian forecasts and the range of Growth Scenarios.

0.42 The starting point for each scenario is the total net growth in employment in each sector shown in each forecast. A series of stages are then taken in order to estimate the quantum of floorspace required to support the scale of economic growth shown in the forecasts:

- The first step is to estimate the full time equivalent (FTE) jobs related to the total jobs growth. This is calculated for each sector based on the ratio of full-time and part-time employment jobs.
- The next step is to disaggregate the proportion of jobs growth in each sector by the type of employment (B Class) use class and non-employment use classes. This is based on the existing mix of jobs in each sector in Copeland.
- This is translated into floorspace by assessing the quantum of floorspace required for each job using employment densities.
- The next stage is to convert floorspace requirements to land requirements using a plot ratio, which is the ratio of the size of land required to support the identified quantum of floorspace.

- The next stage is to convert this to gross development needs. This is done by accounting for the quantum of losses of existing stock which will be expected to be lost over the forecasting period.
- Account is made of changing trends in working from home which is based on forecast increases in the number of people working from home in each sector.
- The final stage is adding a margin of flexibility to support changing business needs.

0.43 Outputs are provided in terms of hectares required for each type of employment use. The use classes have been combined in terms of B1a/b office, B1c/B2 industrial, and B8 distribution. This is in order to provide an indication of demand for each type of use. However, it is recommended the Council are flexible with regard to allocating land for specific types of (B Class) employment use at the detriment to other types of employment uses.

0.44 This process identifies a range of employment land needs figures for Copeland for the period 2021-38. The CE forecast shows a need for around 1.5 ha while the Experian forecast shows a need for around 12 ha of employment land.

h) Conclusions on Employment Land Needs

0.45 The table below shows the employment land needs for Copeland based on the growth in future jobs shown in the econometric forecasts from CE and Experian (the labour demand approach) and the past completions trend. This shows a need for 1.5 ha, 12 ha, and 9.39 ha of employment land respectively.

Table 3. Total Employment Land Needs (ha) – Comparison of Forecasts, 2021-38

	B1a/b	B1c/B2	B8	Total
CE	3.6	-5.9	3.7	1.5
Experian	2.7	5.2	4.1	12.0
Past Completions	4.49	2.93	1.97	9.39

0.46 Planning for the level of growth indicated in the CE forecast (1.5 ha) would result in a considerable reduction in the rate of growth seen in Copeland in the recent past. Furthermore, this would include the assumption that around 6 ha of existing industrial land could be redeveloped to support the development of other employment uses, however the evidence suggests that this would be unlikely to be the case.

0.47 Conversely, planning for the level of growth shown in the Experian forecast (12.0 ha) would result in a modest increase in the of the overall level of growth seen in Copeland in the recent past, with a greater focus on the delivery of industrial and warehouse/distribution uses and less on office space. This is commensurate with the findings of the wider commercial market assessment and stakeholder feedback.

0.48 In conclusion, the analysis suggests that the employment land requirement identified by the Experian forecast (with adjustment made to manufacturing sector) provides the most reasonable estimate for future employment land requirements in Copeland. **This identifies a need for 12 ha of employment land over the period 2021 to 2038.**

0.49 The Growth scenario provides a range of employment land needs but should all five elements come forward within the Plan period this would require **an additional 27.9 ha of employment land** over and above the requirement identified in the CE or Experian forecasts.

1.0 INTRODUCTION

a) Background

1.1 DLP Planning were appointed by Copeland Borough Council to undertake an Economic Development Needs Assessment (EDNA). The objective of the study is to identify future economic and employment growth needs across Copeland for the period covering 2021 to 2038. This EDNA will provide a robust and up to date evidence base which will inform the development of the emerging Copeland Local Plan.

1.2 This document provides an assessment of Copeland's economy, investigating the economic potential of the Borough and identifying realistic yet aspirational growth scenarios based on economic forecasts and modelled scenarios for the delivery of future growth. It then assesses the future quantum and type of employment land which will be required in Copeland over the Plan period to support the levels of identified growth. This planned approach to delivering future employment requirements will ensure communities in the Borough have access to jobs and the employment scenarios in this study have considered local needs and growth requirements.

1.3 This document has been prepared in accordance with the latest national planning policy and guidance as set out in the National Planning Policy Framework (NPPF) and Planning Practice guidance (PPG).

b) Study Scope

1.4 This EDNA report provides an assessment of a wide range of data and contextual analysis in order to provide a thorough and grounded context for assessment. The outputs of the report are then focused upon setting out the overall economic growth and employment needs of Copeland. The scope of the study is as follows:

- Identify and justify the Functional Economic Market Area (FEMA) for planning purposes;
- Review of the national, regional, and local economic policies and growth strategies and how they impact on Copeland's economy;
- Review of Copeland's economic baseline indicators;
- Assessment of Copeland's commercial market signals and employment completions trends;
- A review of a range of econometric forecasts for Copeland and what they show regarding future jobs growth in the borough;
- Five growth scenarios have been developed linked to future development projects in the borough;
- The risks to Copeland's economy due to Brexit and the Covid pandemic have been assessed, including how this might impact on remote working patterns;
- Future floorspace (square metres) and land area (hectare) requirements have been estimated for each scenario.

1.5 The EDNA considers current and future economic growth and employment land needs. It does not provide an assessment of Copeland's employment land supply to meet this demand. This is subject to a separate assessment – the Copeland Employment Land Availability Study (ELAS) which has been prepared alongside this report.

2.0 NATIONAL POLICY AND GUIDANCE

2.1 This section summarises the relevant national planning policy and guidance relating to employment land needs assessments.

a) National Planning Policy Framework

2.2 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied. The original NPPF was published in 2012 and has since been revised in July 2018 and again in February 2019.

2.3 The overarching purpose of the NPPF and the planning system itself is to encourage sustainable development. The policies set out in the NPPF set out the Government's position on what sustainable development means in practice including the three core dimensions to achieve this. These core dimensions are considered interdependent and should therefore be pursued in mutually supportive ways:

a) An economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

b) A social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

c) An environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

2.4 Paragraphs 80 to 84 of the NPPF set out how the Government is committed to supporting the economy stating that "significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development".

2.5 Policies set out within Local Plans should:

a) "set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth, having regard to Local Industrial Strategies and other local policies for economic development and regeneration;

b) set criteria, or identify strategic sites, for local and inward investment to match the strategy and to meet anticipated needs over the plan period;

c) seek to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment; and

d) be flexible enough to accommodate needs not anticipated in the plan, allow for new and flexible working practices (such as live-work accommodation), and to enable a rapid response to changes in economic circumstances".

2.6 Paragraph 120 of the NPPF sets out how planning policies and decisions should reflect changes in the demand for land. This requires regular reviews of both the land allocated for development and of land availability. When Local Planning Authorities (LPAs) consider there is no reasonable prospect of an application coming forward for the use allocated in a plan, the NPPF advises that they should:

a) "as part of plan updates, reallocate the land for a more deliverable use that can help to address identified needs (or, if appropriate, deallocate a site which is undeveloped); and

b) in the interim, prior to updating the plan, applications for alternative uses on the land should be supported, where the proposed use would contribute to meeting an unmet need for development in the area".

b) Planning Practice Guidance

2.7 Planning Practice Guidance (PPG) regarding 'Housing and economic needs assessment' was published by the government in March 2015 and last updated in July 2019.

2.8 The guidance explains how LPAs can determine the type of employment land needed in their area by producing a robust assessment of the needs of existing businesses. National economic trends will be used to understand future needs, however the PPG notes that these national trends may not translate to all areas, due to local distinctions in the employment base. To understand, prepare, and maintain evidence around both current and future business requirements, the PPG outlines the process that LPAs ought to undertake:

- Consider the best fit functional economic market area (FEMA)
- Assess the quality and quantity of the existing employment land
- Consider recent trends in employment supply
- Liaising with the business community to understand market demand
- Taking account of the Local Industrial Strategy
- Assess wider market signals relating to economic growth
- Assess reasons behind market failure

2.9 As set out in the PPG Policy makers should use a range of data when considering employment need including:

- Sectoral and employment forecasts and projections (labour demand)
- Demographically derived assessments of future employment needs (labour supply techniques)
- Analysis of past employment land take-up and/or future property market requirements
- Consultation with relevant organisations and review of relevant studies to understand business trends and changing business models

2.10 As also highlighted in the PPG it is important to consider whether there are specific requirements in the local market which affect the types of land or premises needed. Consideration of clustering certain industries can be beneficial to encourage collaboration, productivity and innovation as well as in driving the economic prospects of that area.

3.0 FUNCTIONAL ECONOMIC MARKET AREA (FEMA)

3.1 Planning Practice Guidance (PPG) sets out that authorities should identify the Functional Economic Market Area (FEMA) and provides the following guidance on how this should be undertaken:

"Since patterns of economic activity vary from place to place, there is no standard approach to defining a functional economic market area, however, it is possible to define them taking account of factors including:

- *extent of any Local Enterprise Partnership within the area;*
- *travel to work areas;*
- *housing market area;*
- *flow of goods, services and information within the local economy;*
- *service market for consumers;*
- *administrative area;*
- *catchment areas of facilities providing cultural and social well-being; and*
- *transport network."*

Paragraph: 019 Reference ID: 61-019-20190315

a) Existing Evidence and Previous Studies

3.2 As the starting point for defining the FEMA, we have undertaken a review of the existing economic evidence base for Copeland and the surrounding authorities to identify any existing functional economic links that Copeland has. A summary of this is set out in Table 4.

3.3 These identify a number of economic linkages between Copeland and the surrounding authorities; however none provide a definitive view or definition of the FEMA that covers the authority.

3.4 The majority of the surrounding authorities have not identified their FEMAs.

Table 4. Summary of Previous Studies

Authority	Functional Links / FEMA	Source
Copeland	The 2020 EDNA identified that the Travel To Work Areas (TTWA) indicate that Copeland operates as a self-contained FEMA, and that the economic links in terms of commuting flows were mainly with the neighbouring authority of Allerdale.	Copeland Borough Council Economic Development Needs Assessment Draft Report, July 2020
Allerdale	It should be noted that as part of the Local Plan Part 2, Allerdale has allocated 39.14ha of employment land at Lillyhall. Lillyhall sits close to the border between Copeland and Allerdale, and as such, the development of this employment land could increase connectivity. Economic links between Copeland and Allerdale were highlighted by Allerdale's Workspace and Employment Land Study (2016) that identified Sellafield as a prominent employer for residents; more than one fifth of Sellafield's workforce are Allerdale residents.	Allerdale Local Plan (Part 2) Site Allocations July 2020 Allerdale's Workspace and Employment Land Study 2016
Barrow-in-Furness	The 2016 Employment Land Review (updated 2017) identifies that Barrow-in-Furness's TTWA extends into the Lake District National Park and includes part of South Lakeland. However, it highlights that even though Copeland lies beyond the TTWA there are still important economic links between the Borough and Copeland. It is recognised that the present and future nuclear sector opportunities in Copeland provide employment opportunities, with between 300-500 people currently travelling to work in Sellafield each day from Barrow-in-Furness, and many more residents employed in companies responsible for transporting nuclear waste from Sellafield via Barrow Port.	Barrow-in-Furness Employment Land Review 2016 (updated 2017)
Carlisle	Neither the Economic Review or Employment Sites Study make reference to economic links with Copeland or the neighbouring authorities of Eden or Allerdale. However, the Employment Sites Study identifies that the Carlisle property market is highly self contained, and many Carlisle based businesses have links with other regions and sub regions in terms of their operations.	Carlisle Economic Review, 2013 Carlisle Employment Sites Study, 2010
Eden	The Eden District Employment Land Study identifies that in general, the District meets its own needs and has low level of commuting, however it is recognised that there are some functional social and economic links with Carlisle.	Eden District Employment Land Study, 2009
South Lakeland	As identified by South Lakeland's 2012 Employment Land Review, much of the economic and employment growth is related to the businesses serving BAE Systems supply chain which is based in Barrow-in-Furness. As such, it considered that South Lakeland has stronger economic links with Barrow-in-Furness as opposed to Copeland.	South Lakeland's 2012 Employment Land Review

3.5 Therefore, this analysis suggests that Copeland is somewhat self-contained, with the main economic links being with the neighbouring authority of Allerdale. However, no definitive FEMA could be determined from this review of literature.

b) Local Enterprise Partnerships (LEP)

3.6 Copeland is part of the Cumbria LEP, alongside Allerdale, Barrow-in-Furness, Carlisle, Eden, and South Lakeland.

3.7 The Cumbria LEP have produced a Strategic Economic Plan (2014), a Local Industrial Strategy (2019), and an Infrastructure Plan (2016).

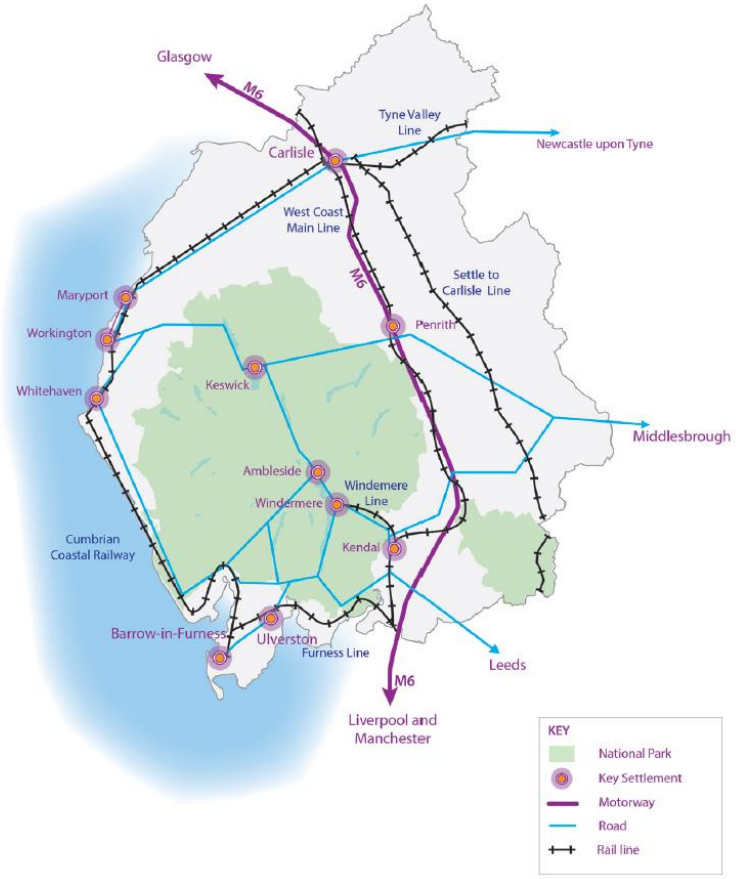
3.8 The Local Industrial Strategy recognised that Cumbria has a complex and unique economic geography; as it is the 8th geographically largest LEP area but has the lowest population density of any LEP area.

3.9 Cumbria's population is concentrated in a number of key settlements across the county. Carlisle and Barrow-in-Furness are the two largest urban centres, although population and economic activity are also concentrated in Whitehaven, Workington, Cockermouth, and Maryport.

3.10 As shown in the figure below, the Cumbria LEP has a strong north-south transport spine via the M6 and the West Coast Mainline. This spine connects the major settlements within Cumbria, as well as connecting the LEP area with the north and south of England as well as Scotland. There is also the Cumbrian Coast Rail Line running through Copeland connecting Whitehaven to Carlisle and Barrow-in-Furness.

3.11 However, it is recognised that the East West connections (including the A66 and A69) are limited and as such, the Infrastructure Plan identifies that improvements are required to improve the movement of people and goods across the county.

Figure 1. Spatial Context of Cumbria LEP area



Source: Cumbria Infrastructure Plan 2016

3.12 The Local Industrial Strategy Identifies the following linkages with regard to accessibility around the main settlements of Cumbria:

- The M6 connects Carlisle with Penrith and Southern Scotland
- Penrith (Eden) is well connected to Carlisle via the M6 and rail lines, as well as the A66 connecting Penrith with Keswick to the west
- Copeland and Allerdale have the strongest commuting flows within Cumbria due to the connectivity between Whitehaven, Workington, and Maryport via both road and rail links
- Kendal (South Lakeland) is linked to Barrow-in-Furness via road and rail links, as well as with Penrith via rail and road connections

3.13 Overall, the Local Industrial Strategy identifies that the strongest links are between Allerdale and Copeland, between Barrow and South Lakeland, and between Eden and Carlisle. In line with this, the rail links follow a similar connectivity pattern:

Table 5. Train information for the Cumbria LEP area

Journey destination/ departure from			Direct train available	Shortest journey available	Frequency
Whitehaven	⇄	Maryport	Yes	29 mins	~ 60 minutes
Whitehaven	⇄	Barrow-in-Furness	Yes	1 hr 22 mins	~ 60 minutes
Whitehaven	⇄	Kendal	No	2 hr 9 mins	~ 60 minutes
Whitehaven	⇄	Penrith	No	1 hr 32 mins	~ 70 minutes
Whitehaven	⇄	Carlisle	Yes	1 hr 9 mins	~ 60 minutes
Whitehaven	⇄	Workington	Yes	17 mins	~ 60 minutes

Source: Trainline

3.14 In conclusion, the existing transport links within the Cumbria LEP are somewhat limited in terms of connecting each of the authorities/major settlements with one another. However, there are links between boroughs such as Copeland and Allerdale.

3.15 As well as existing transport infrastructure, we have assessed the ongoing and future infrastructure schemes in the Cumbria LEP area and surrounding LEP areas. This was to assess if any projects ongoing or in the future are likely to increase the connectivity between LEP areas/ local authorities and thereby potentially alter the FEMA. This information is set out in Table 6.

Table 6. Infrastructure improvements in the Cumbria LEP area and surrounding LEP area that may alter connectivity

LEP Area	Infrastructure Improvements	Source
Cumbria LEP	The Cumbria Strategic Economic Plan identified four main priorities for maximising economic growth in Cumbria one of these is improving the Strategic connectivity of the M6 corridor. With regard to the M6 corridor, the SEP identifies that investment will make connectivity between the key settlements of Carlisle, Penrith, and Kendal and therefore strengthen the connectivity outside of Copeland. The SEP also states that there are discussions underway to explore cross border collaborations with Scotland to increase the economic inter-connectivity between north Cumbria and south west Scotland. The Cumbria LEP infrastructure plan also identifies the Cumbrian Coastal Railway Enhancement as a key short term priority. This entails a package of measures to enhance the coastal railway between Carlisle and Carnforth via West Cumbria and Barrow. The aim of these improvements is to enhance capacity, support economic growth across Cumbria, and aid delivery of new investment. The LEP infrastructure plan also identifies medium to long term priorities including Carlisle Southern Link Road to unlock 10,000 homes as well as new employment opportunities, A590 road enhancements to improve links across the south of Cumbria, improvements to the A66 to improve access between west Cumbria and the M6, the Ulverston Bypass which aims to unlock employment/housing along the A590 corridor, and the Whitehaven Relief Road that will release development sites.	Cumbria Strategic Economic Plan 2014-2024 (March 2014) Cumbria Infrastructure Plan (May 2016)
North East LEP	The North East SEP states that there is a proposal being developed for a Borderlands Inclusive Growth Deal to improve the connections between Northumberland, Cumbria, and the South of Scotland.	North East Strategic Economic Plan (January 2019)
Lancashire	The Lancashire LEP has secured £320 million Growth Deal, as such numerous projects are to be supported with this. Some examples include: • Link road between Preston and South Flyde to the M55 • A6 Broughton Bypass to relieve pressure at the A6 north of Preston • Rail improvements to increase trains between East Lancashire and Greater Manchester	Lancashire Enterprise Partnership Website
York and North Yorkshire	The York and North Yorkshire LEP have identified numerous transport projects, the main projects include: • Upgrades to the A64 to improve connectivity between York and Scarborough and strengthening economic links • Rail upgrades to improve services in Scarborough, Harrogate, Selby, Hull, and Skipton	York and North Yorkshire Website

3.16 This assessment suggests that the planned and ongoing infrastructure improvements within the Cumbria LEP and surrounding areas are unlikely to influence FEMA geography.

c) Travel to Work Areas and Commuting Patterns

3.17 The Office of National Statistics (ONS) publishes Travel to Work Areas (TTWAs), the latest TTWAs were published in 2015 and are based on commuting data from the 2011 Census. The TTWAs aim to identify self-contained labour market areas in which the majority of commuting occurs within the boundary of the area.

3.18 The TTWAs were developed as approximations to self-contained labour markets, i.e., areas where most people both live and work. As such they are based on a statistical analysis rather than administrative boundaries.

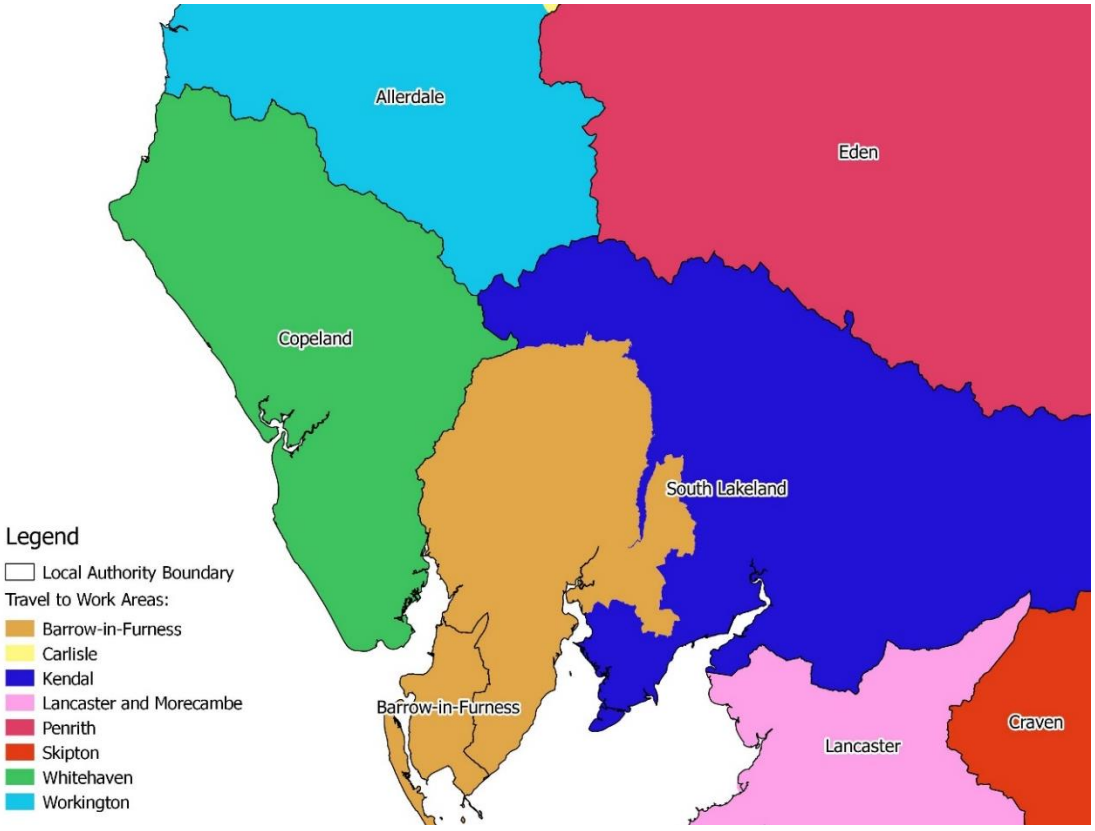
3.19 With regard to self-containment rates, ONS's notional target to define a Travel to Work Area is for at least 75% of an area's resident workforce to work in the area, where the area's population is at least 3,500. However, where an area's working population is in excess of 25,000, a TTWA can be defined by a self-containment rate as low as 66.7%.

3.20 In utilising this approach, ONS has identified 228 TTWA's across the country. However, as commuting patterns between areas overlap and diffuse, therefore in practice it is not possible to divide the UK in to separate labour market areas.

3.21 The TTWA covering Copeland and the surrounding areas are shown in the figure below whereby the colours respond to the TTWA and the black lines are the Local Planning Authority boundaries. This identifies that the Travel to Work Area follows the exact lines of the Local Planning Authority boundary.

3.22 Therefore, with consideration to the guidance which recommends the use of FEMAs that best fit the local authority boundary, the TTWAs indicate that Copeland is a standalone FEMA.

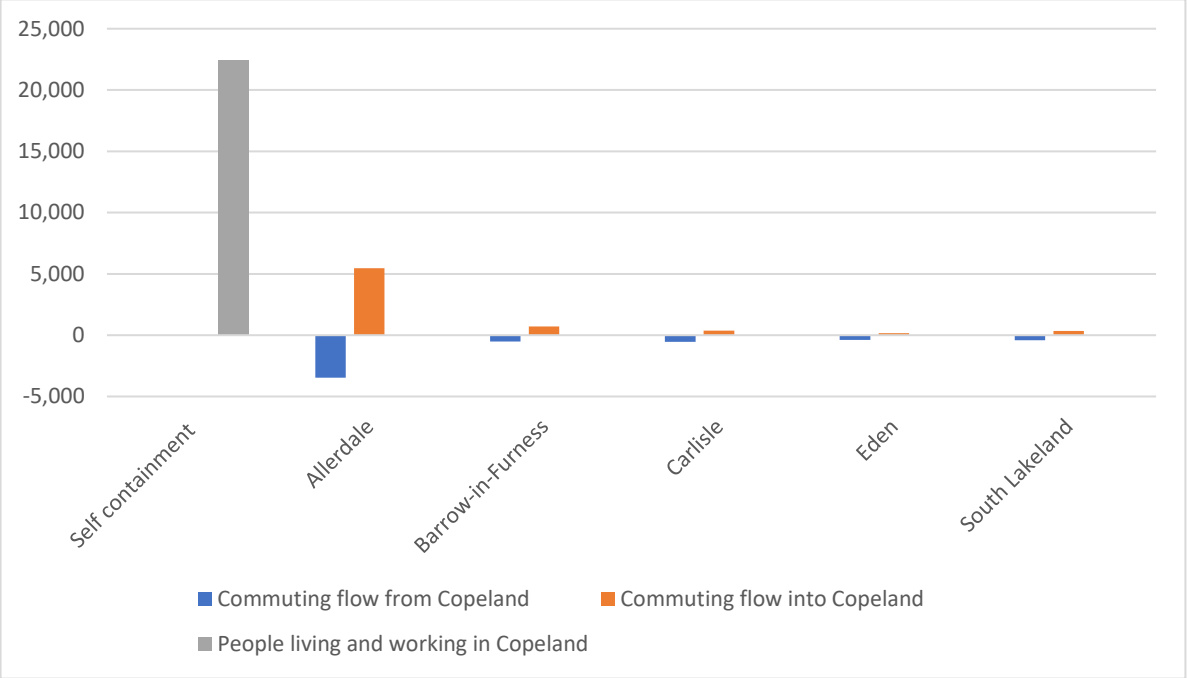
Figure 2. Travel to Work area for Copeland



Source: SPRU Analysis of ONS data

3.23 The commuting flows shown in the figure below highlight how those living and working in Copeland (self-containment) is far higher than the commuting flows to/from Copeland from other areas, thereby highlighting the self-containment of Copeland.

Figure 3. Commuting flows between Copeland and surrounding areas



Source: SPRU analysis of Census Data

d) Housing Market Areas

3.24 There is no requirement in the guidance for HMAs and FEMAs to be coterminous. However, it is generally accepted that there are practical benefits in identifying conterminous areas when it comes to aligning housing and economic growth – both in terms of identifying housing and employment land needs and ensuring the delivery of sites to meet these needs in the right locations to create sustainable development.

3.25 Copeland Borough Council published a Strategic Housing Market Assessment and Objectively Assessed Housing Need in October 2019. This identifies that Copeland is a Housing Market Area in its own right.

e) Conclusion

3.26 This assessment to define the FEMA has considered a wide range of existing reports and data. The key findings for each element considered are summarised below:

- Commuting – there is a high proportion of people living and working in Copeland suggesting self containment. Whilst there are moderate commuting flows to/from Allerdale, the self containment rate of Copeland is still higher than that of Copeland and Allerdale combined.
- Travel to Work Areas (TTWAs) – ONS define a TTWA that follows exactly the local planning authority boundary.
- LEP areas – the Cumbria LEP covers Copeland, Allerdale, Barrow-in-Furness, Carlisle, Eden, and South Lakeland. An evidence review of each local authority identifies that there are some links with Allerdale with regard to an allocated employment site on the border of Copeland.

- Transport links – a review of the existing and planned transport links found that Copeland strongest transport links were with Allerdale, however generally, the transport links are poor across Cumbria.

3.27 Overall, the evidence suggests that Copeland can be defined as a standalone FEMA. This corresponds with the findings of the 2019 Copeland Borough Council Economic Development Needs Assessment.

3.28 The guidance which suggests FEMAs should be 'best fit' to the local authority boundaries. This suggests that the only realistic alternative would be to consider a FEMA covering Copeland and Allerdale. This has been considered due to the established transport links between the two boroughs and the potential future links relating to the planned expansion at the Lillyhall Industrial Estate in Allerdale close to the border with Copeland. However, the evidence relating to commuting patterns and self-containment rates for both areas supports two self-contained FEMAs covering Copeland and Allerdale rather than a joint FEMA.

3.29 Furthermore, while only anecdotal at this stage, the Covid pandemic has resulted in increased levels of home-working in Copeland, suggesting a further increase in the commuting self-containment rate in Copeland since the publication of the 2019 study and the latest TTWA data.

4.0 ECONOMIC POLICY REVIEW

a) National Strategy

i) *Building a Britain Fit for the Future*

4.1 In November 2017, the Government published Building a Britain fit for the future which sets out the overarching industrial strategy for the UK. The first part of the strategy includes a series of policies which impacts on all sectors of the economy titled the 'Five Foundations'. These are considered the "essential attributes" for a successful economy and include:

- Ideas (R&D, innovation)
- People (skills and education)
- Infrastructure (broadband, energy, transport)
- Business environment (support for specific sectors and SMEs)
- Places (Local Industrial Strategies)

4.2 One of the key commitments made through the industrial strategy is for the total R&D expenditure to increase. The Industrial Strategy Challenge Fund is a "core pillar" of this commitment and includes a £4.7 billion commitment to businesses seeking funds to research and develop technology or processes related to the aims of the industrial strategy.

4.3 The second part of the report includes details of a series of partnerships with individual sectors and the government including the 'Sector Deals'. These Sector Deals include bespoke arrangement between the government and industry with each involving three main elements:

1. An industry council to facilitate discussion between industry leaders, government officials and Ministers, and leading academics.
2. Access to a competitively awarded fund for R&D in the sector.
3. Policies to support the development of the skills needed in the sector.

4.4 To date a range of Sector Deals have been announced covering the following key areas:

- Aerospace
- Artificial Intelligence
- Automotive
- Construction
- Creative industries
- Life sciences
- Nuclear
- Offshore wind
- Rail
- Tourism

4.5 The third aspect of the strategy involves a series of challenges facing the economy. Highlighting how solving these challenges will help the whole economy to strengthen and develop. The 'Grand Challenges' identified include:

- AI and the data revolution (how to embed and maximise the advantages of AI and

data)

- Clean growth (low carbon technologies across the economy)
- Mobility (low carbon transport, automation, infrastructure)
- Aging society (healthcare and labour market challenges)

b) Regional Policy

ii) *Cumbria LEP Strategic Economic Plan (2014-2024)*

4.6 The Cumbria LEP Strategic Economic Plan (SEP) was published in March 2014 and sets out four strategic priorities for Cumbria:

- Advanced Manufacturing growth – there is a long industrial heritage in Cumbria and manufacturing continues to be a major employer in the region with sites such as Sellafield and BAE systems as well as multinational companies such as Pirelli Tyres, Nestlé, United Biscuits, Iggesund Paperboard, Kimberley-Clark, Heinz, Sealy Beds, GSK bio-pharmaceuticals, Innovia Films and Siemens sub-sea technologies.
- Nuclear and Energy Excellence – the nuclear industry represents one of Cumbria's key assets with Sellafield directly and indirectly providing around 20,000 jobs for people in Copeland and a wider 44,000 across the UK (Oxford Economics, 2017).
- Vibrant rural and visitor economy – the rural nature of Cumbria attracts many visitors each year and as such Cumbria has a strong visitor economy.
- Strategic connectivity of the M6 corridor - The M6 provides the strategic route through the county with the connections via the A66 and A590 to the industrial areas in West Cumbria and the Furness peninsula, improvements are key to boosting economic development in Cumbria

4.7 The SEP also undertook a SWOT assessment of Cumbria's economy, this has been summarised in Table 7.

Table 7. SWOT Assessment Cumbria LEP

Strengths	• Long term GVA growth • Employment strong in manufacturing, hospitality, retail and food and drink manufacturing • Number of internationally significant employers • World class expertise and skills base in nuclear, energy and specialist manufacturing • Resilient economy due to diversity • Internationally renowned tourism 'brand' • Significant environmental assets: LDNP, several AONBs, supporting the tourism offer • Product strength in the agri-food sector linked to food and drink provenance • High business survival rates • M6 strategic connectivity
Weaknesses	• GVA per job still low and signs of slow down in GVA growth • Relatively weak employment in finance, IT and business sectors • Projected decline in working age population • Unemployment low but pockets of high rates and high youth unemployment • Low business start up rate • Transport, planning and skills reported as barriers • Limited (secure) high-speed broadband and mobile phone coverage • Lack of affordable housing in some areas • Current housing mix unable to meet the needs to retain and attract staff, expertise and investment • Connectivity to core growth sites of Sellafield and Barrow via A590, A66 and rail links to the West Coast Mainline
Opportunities	• Potential to protect and build on high value manufacturing • Environment sector – low carbon, renewables, higher value agri-products • Maximising opportunities for innovation and diversification through developing the UK Centre of Nuclear Excellence • Construction of a new nuclear power station at Moorside • Supply chain development in our key sectors and exploitation of significant diversification opportunities • Exploit opportunities for bringing manufacturing back to the UK which has previously been moved offshore • Develop high value tourism offer • Build further on our niche and artisan food and drink sector • Connecting Cumbria broadband
Threats	• Economic conditions worsen – further squeeze on household spending / struggling exports with weak Eurozone demand • Vulnerability to actions to reduce public sector deficit • Manufacturing jobs in Sellafield and BAE are heavily reliant on public spending • Demographic trends constrain indigenous workforce growth • Failure to take advantage of the opportunities presented by our key sectors • Lack of investment in social and leisure infrastructure – need a stronger offer for attracting and retaining working age families and individuals to settle in Cumbria

iii) *Local Industrial Strategy March 2019*

4.8 Cumbria LEP's Local Industrial Strategy was published in March 2019. The document outlines the vision for Cumbria:

"The place to live, work, visit and invest sustainably - where exceptional industry and

innovation meets a breathtakingly beautiful and productive landscape."

4.9 Supporting this vision the following strategic objectives for Cumbria are identified to be:

- Strategic Objective 1: Growing and using our talent pool
- Strategic Objective 2: Capitalising on our productivity, innovation and enterprise potential
- Strategic Objective 3: Exploiting underdeveloped economic opportunities to help get a better balanced economy
- Strategic Objective 4: Ensuring that all of our residents contribute by sharing prosperity and opportunity
- Strategic Objective 5: Improving connectivity across the county

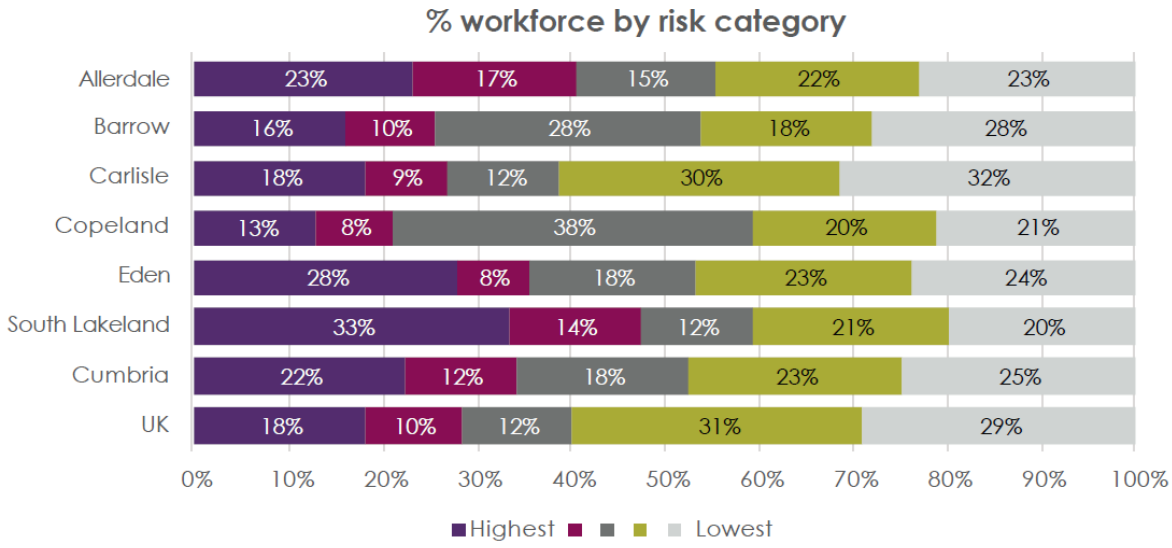
4.10 The report does identify that Brexit is likely to have implications on the economy in Cumbria with the three sectors likely to be most affected are farming, tourism and food manufacturing (in the case of the last two because of the importance of EU labour). These account for about 13% of Cumbria's GVA (£1.5 billion) but 19% of jobs (around 50,000). Manufacturing will also be affected as there is a substantial proportion of sales to the EU and important use of EU supplies (overall 10% of GVA, £1.1 billion and 5% of jobs or 12,000 often well-paid jobs). However, nuclear and shipbuilding sub sections of manufacturing will be far less affected by Brexit.

iv) *Restart Reboot Rethink – A plan for Cumbria's economy recovery*

4.11 This report details how Cumbria intends to recover economically from the implications of the Covid-19 pandemic.

4.12 A Vulnerability Assessment on the 40 key sectors found that Copeland has the smallest percentage of workforce in the low risk compared with the wider national proportions.

Figure 4. Vulnerability Assessment - exert of Figure 2 of the Restart Reboot Rethink



4.13 The report notes that Cumbrian recovery model will be based on three main stages:

- Restart - getting the economy moving and leaving behind the emergency response phase.
- Reboot – defining a new path towards realising the Local Industrial Strategy (LIS), recognising that the economic landscape has changed significantly since the initial LIS development phase
- Rethink – New ways of looking at policy and economic activity, identifying opportunities and

catalysing them locally if not nationally.

4.14 The report notes that there are likely to be altered priorities and new opportunities to further economic development in a post covid world. As a result, six Rethink themes have been identified as:

- Clean Energy Production – a world-recognised heritage and expertise which provides the platform for significant future investment in energy generation
- Diversify to Thrive – maximising business opportunities by localising supply chains, moving into new markets and looking for diversification opportunities.
- The New Visitor Experience – capturing the changes in sustainable visitor behaviour by offering a world class experience to a wide range of markets
- The Future of Food – enhancing Cumbria's crop based food production to sit alongside its existing meat and dairy excellence
- Cumbria - The UK's Natural Capital – promoting and exploiting the benefits created by having the most protected landscape in England
- The Way We Live, The Way We Work Now – benefitting from the rethink that people are making about their lives and the way that they will live and work in the future.

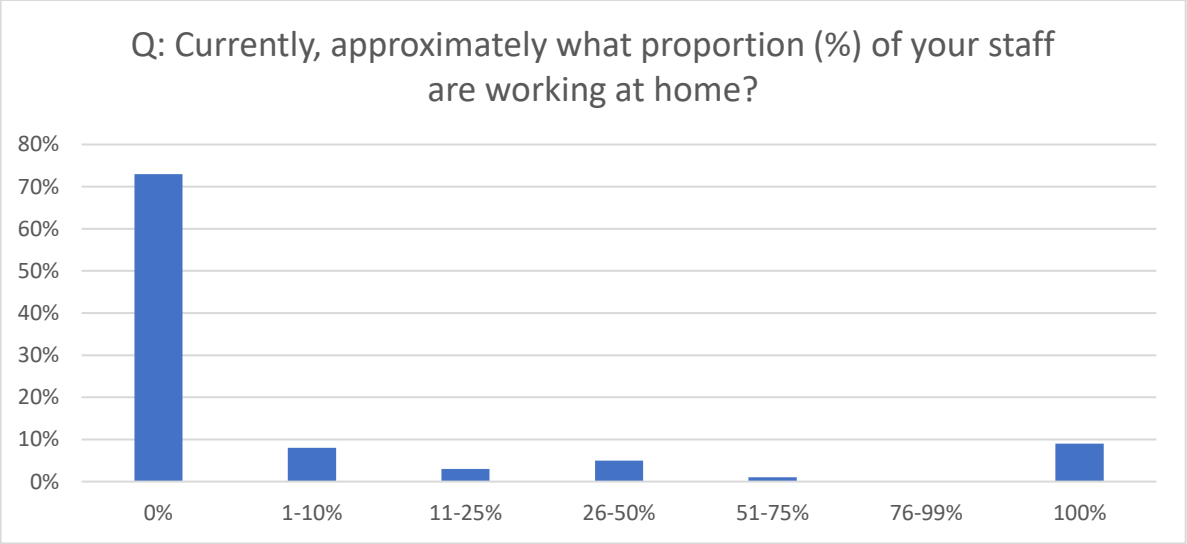
4.15 This Rethink strategy thereby aims to maximise the opportunities that may arise in existing sectors that are operating in Cumbria at present.

v) *Cumbria Business Survey 2020*

4.16 A Cumbria Business survey was undertaken in 2020 which sought to gather information on behalf of the councils and business support organisations in Cumbria to inform policy, planning, and support for businesses in the county for the next year or so. Some of the key collated responses are outlined below.

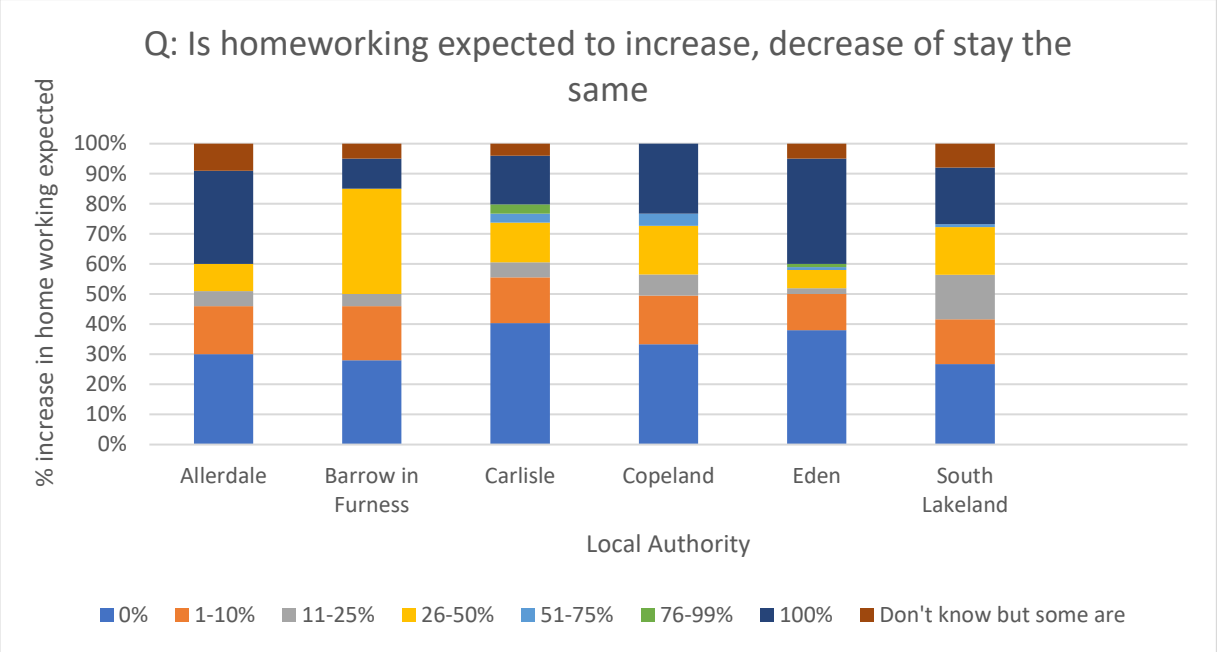
4.17 Question 8 was regarding the level of homeworking. The graph below shows that at the time of the survey in 2020 during covid restrictions 73% of the businesses that were surveyed had 0% of their workforce working from home this is unsurprising given the high proportion of workers in industries such as manufacturing where home working is not applicable.

Figure 5. Percentage of workforce working from home



4.18 With regard to the continuation of homeworking, the responses suggest that the level of homeworking in Copeland, as well as the other Cumbrian districts is anticipated to increase with just 33% percent of respondents noting that working from home would not increase.

Figure 6. Expected increase in homeworking.



4.19 Considering the impacts of the covid-19 pandemic, respondents were asked how their business was affected by pandemic. The responses are as follows. This shows that the majority of businesses who responded have been implicated by covid-19 with the main impacts being those related to the social distancing measures (67%), fall in customer demand (64%), and uncertainty regarding forward planning due to coronavirus (72%).

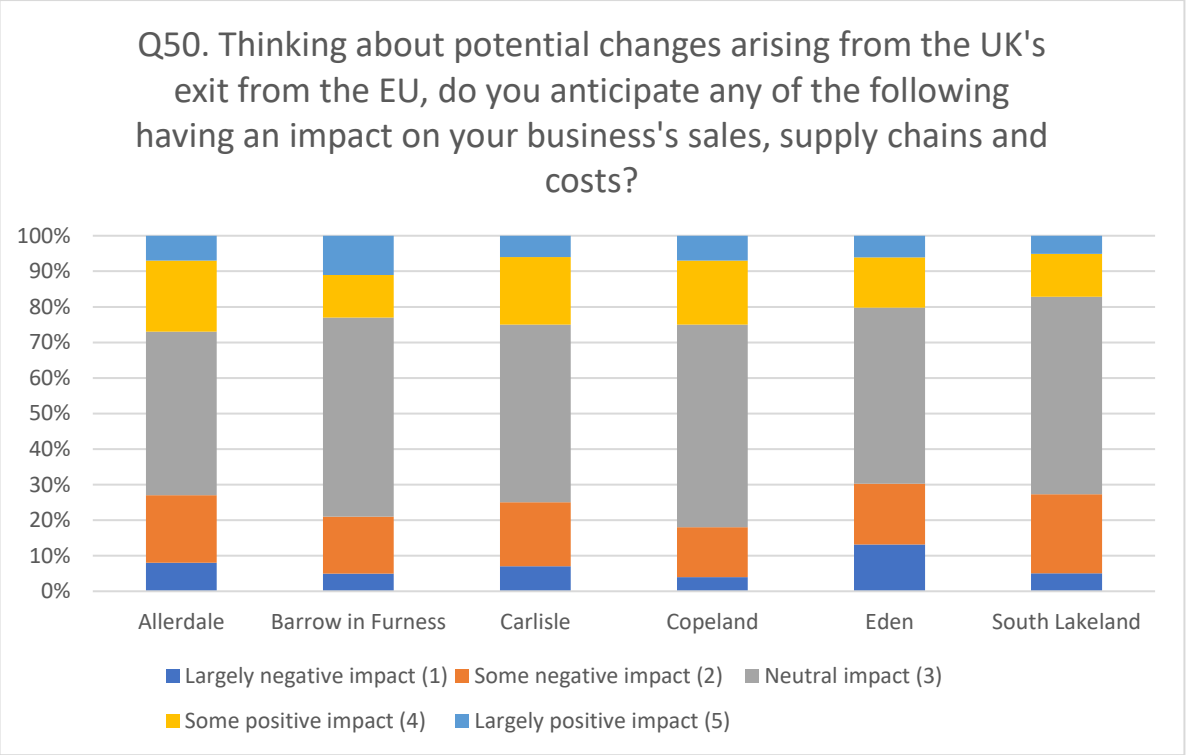
Table 8. Effects of the covid-19 pandemic

Q23/5. What were these other factors arising from the Coronavirus pandemic	Cumbria
Uncertainty with regard to forward planning related to the Coronavirus pandemic	72%
Trading restrictions related to physical/social distancing as a result of the Coronavirus pandemic	67%
Fall in demand as a result of the Coronavirus pandemic	64%
Supply chain issues/accessing materials/goods/services resulting from the Coronavirus pandemic	57%
People able to do the job	44%
Cashflow	37%
Access to or speed of broadband	32%
Other factors arising from the Coronavirus pandemic	26%
Uncertainty with regard to forward planning related to the UK's exit from the EU	25%
Parking for customers, staff or deliveries	22%
Public transport services	21%
Roads	20%
Business rates	19%
Other factors arising from the UK's exit from the EU	18%
Business rent	15%
Suitable air linkages to Cumbria	14%
Other	9%
None	2%

4.20 Questions were also asked about the implications of Brexit. The responses are shown below. This shows that for most Cumbrian authorities around 50% of responses state that Brexit will have a neutral impact on their businesses sales, supply chain, and costs. Allerdale businesses noted the most positive impacts of Brexit at 27% some/largely positive whereas Eden businesses noted the highest proportion of negative responses at 30%.

4.21 Copeland businesses responses indicated that 18% of businesses thought there would be negative implications of Brexit, 57% anticipated neutral affects, and 25% noted positive outcomes were expected.

Figure 7. Implication of Brexit on business sales, supply chains, and costs



c) Local Policy

vi) *West Cumbria Evidence Base Employment Land Review*

4.22 The West Cumbria Employment Land Review Update was published in January 2012. This report updates the West Cumbria Employment Land and Premises Study published in 2008. The update was undertaken to update the employment land supply position as well as factor in the future requirements of a Nuclear New Build.

4.23 As part of this update, a number of policy interventions were identified:

- Improving the public realm and environment at employment sites
- Introduce a range of factors to drive inward investment and enhance quality of life by considering alternative uses for employment sites
- Improving the quality of construction and design on employment sites
- Recognise the increase in homeworking and support through broadband improvements
- Promote private/public sector alignment
- Support start up businesses and diversification of the economy
- Support the nuclear sector by providing the sites they need

4.24 The analysis found that Copeland had identified sufficient supply to meet demand as shown in the table below.

Table 9. Low range land requirements and supply - Copeland

	Supply	Demand	Balance
Office (B1)	35.74	25.26	10.48
Industrial and Warehouse (B2 and B8)	52.26	8.28	43.98
Total	88.00	33.54	54.46

4.25 However, it was identified that there is little high quality B1 floorspace availability and this was required to accommodate the aspirations of Sellafield specific employment opportunities.

4.26 With regard to industrial floorspace, it was noted that the demand is locally driven and is generally for smaller and more cost effective space as indicated by the long term vacancies in high quality premises.

4.27 The report also notes that for forward planning purposes, past development rates form the most appropriate basis for the calculations.

vii) *Copeland Development Needs Assessment July 2020*

4.28 This report, published in July 2020 aimed to provide an overview of the economic performance of Copeland Borough and the anticipated future growth trajectory of the borough's economy.

4.29 The report made the following conclusions:

- Copeland represents a distinct FEMA
- There is a stock of employment floorspace of 256,520sqm of B-class use. Around 70% of this is industrial floorspace
- The office market is focused on Whitehaven which contains 50% of all the office floorspace in the borough and around a third of the industrial floorspace
- The nuclear sector is established in Copeland and has driven significant market activity. Beyond the nuclear sector the commercial demand is localised and limited.
- With regard to demand, it was found that the net requirement ranges from -7.68ha to 43.95ha between 2017-2035

5.0 ECONOMIC BASELINE

5.1 This section provides a baseline assessment of the assessment of the local and regional economic dynamics and characteristics of Copeland's economy and labour market.

5.2 Copeland's economy has sectoral strengths in the nuclear sector and manufacturing.

5.3 Copeland has a current resident population of 68,183 (ONS MYE, 2019) and economy that supports 35,900 jobs (BRES, 2018). 60% of Copeland's residents are aged between 16-64 (ONS MYE, 2019), this is comparative to the working age population levels across the wider Cumbria area as well as nationally.

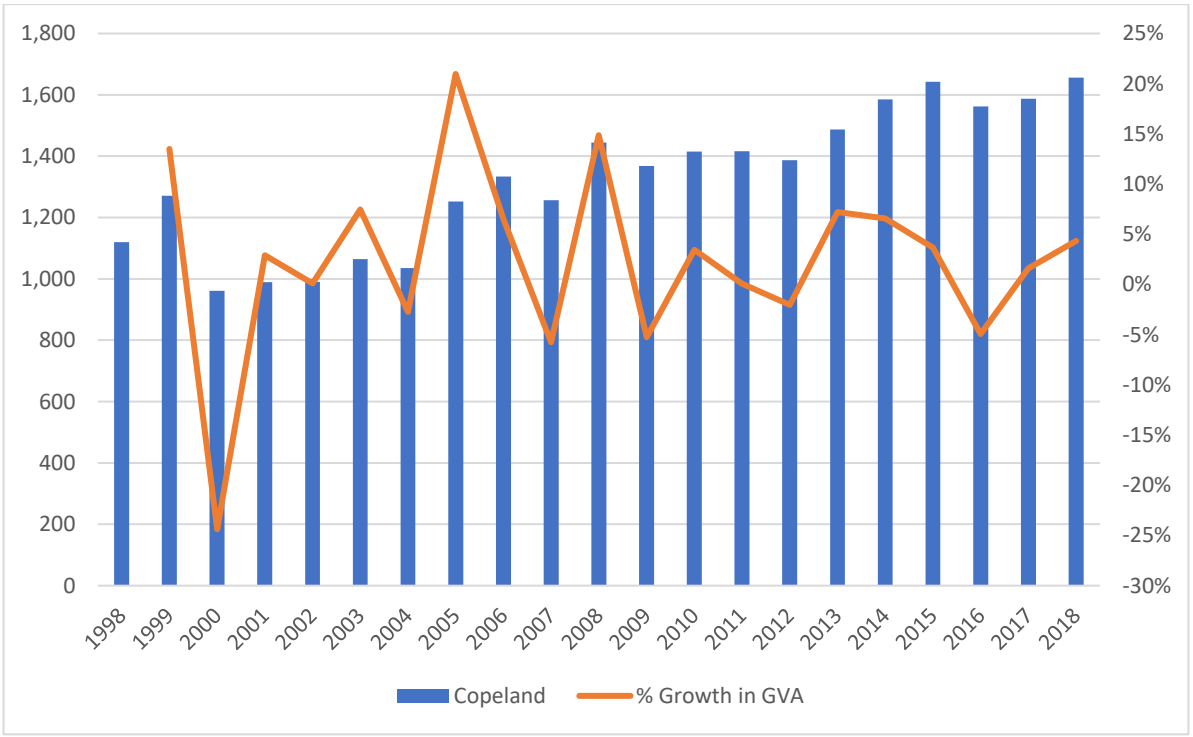
a) Productivity (GVA)

5.4 The Gross Value Added (GVA) is a measure of the increase in the value of the economy due to the production of goods and services. In 2019, the GVA of Copeland was valued to be £1656 million, this accounts for 14% of Cumbria's total GVA.

5.5 Copeland's GVA dropped significantly in 2000 but has steadily risen between 2000 to 2018 despite fluctuations between years.

5.6 The percentage growth in GVA has fluctuated between 1998 and 2018 with a significant drop in 2000, and its peak in 2005.

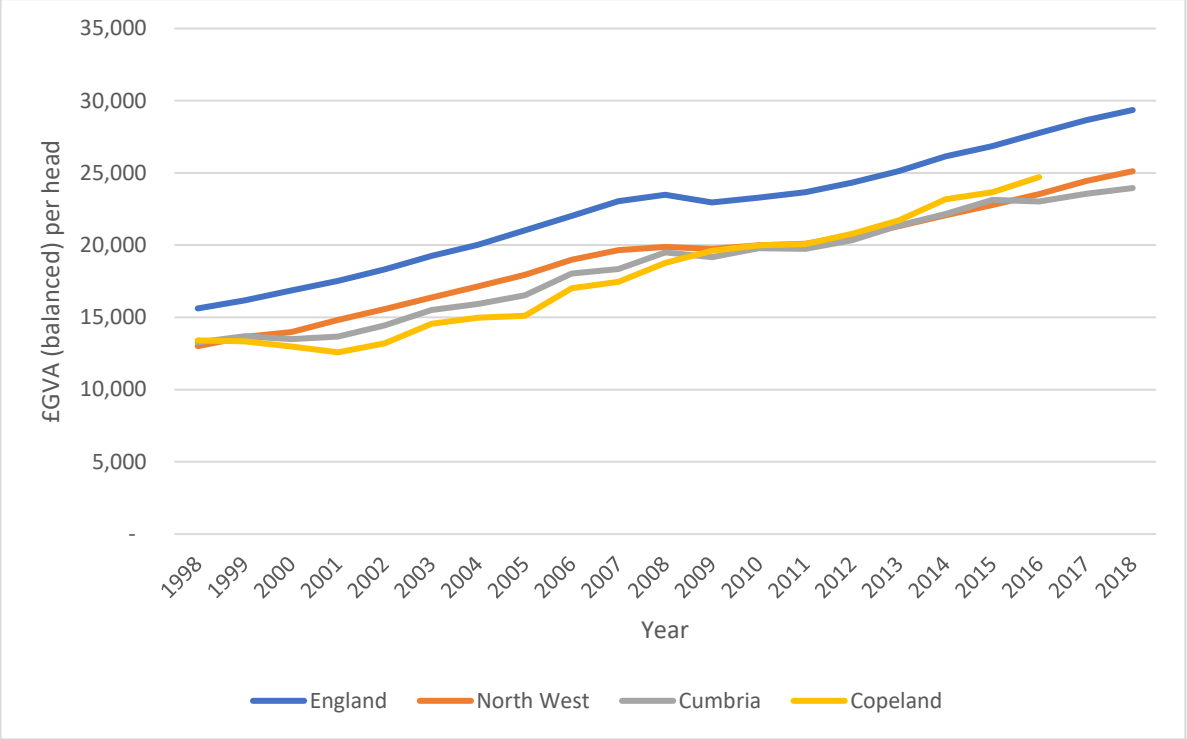
Figure 8. Historical Trends of GVA – Copeland



Source: ONS, 2019. GVA (balanced) current price

5.7 Considering the GVA per head of population, Figure 9 shows that whilst historically Copeland's GVA was lower than the national, regional, and Cumbria level, after 2008 Copeland's GVA per head has risen to above the Cumbria and North West level.

Figure 9. GVA per head of population (income approach) (£ per head)*



Source: ONS, 2018 - GVA (balanced approach)

** the data for Copeland for the years after 2016 is not available as it is not reported at this level of geographical region each year*

5.8 With regard to historic growth rates of GVA, Copeland had the strongest compound annual growth rate over the 7 years following the last recession (2009-2016) compared to England, North West, and Cumbria. This is in comparison to the ten years prior when the growth rate in Copeland was more modest relative to the county, region, and England.

Table 10. GVA past growth rates

	1998-2008	2009-2016
England	3.78%	2.41%
North West	3.93%	2.23%
Cumbria	3.56%	2.32%
Copeland	3.11%	2.94%

Source: ONS, 2018 GVA (balanced approach)

5.9 Considering the sectoral breakdown of GVA, Table 11 shows that the Manufacturing sector provides the largest contribution to GVA in Copeland – at 36% of total GVA. Real estate activities and Public administration and defence are the next biggest contributors.

Table 11. Sectoral breakdown of GVA, Copeland

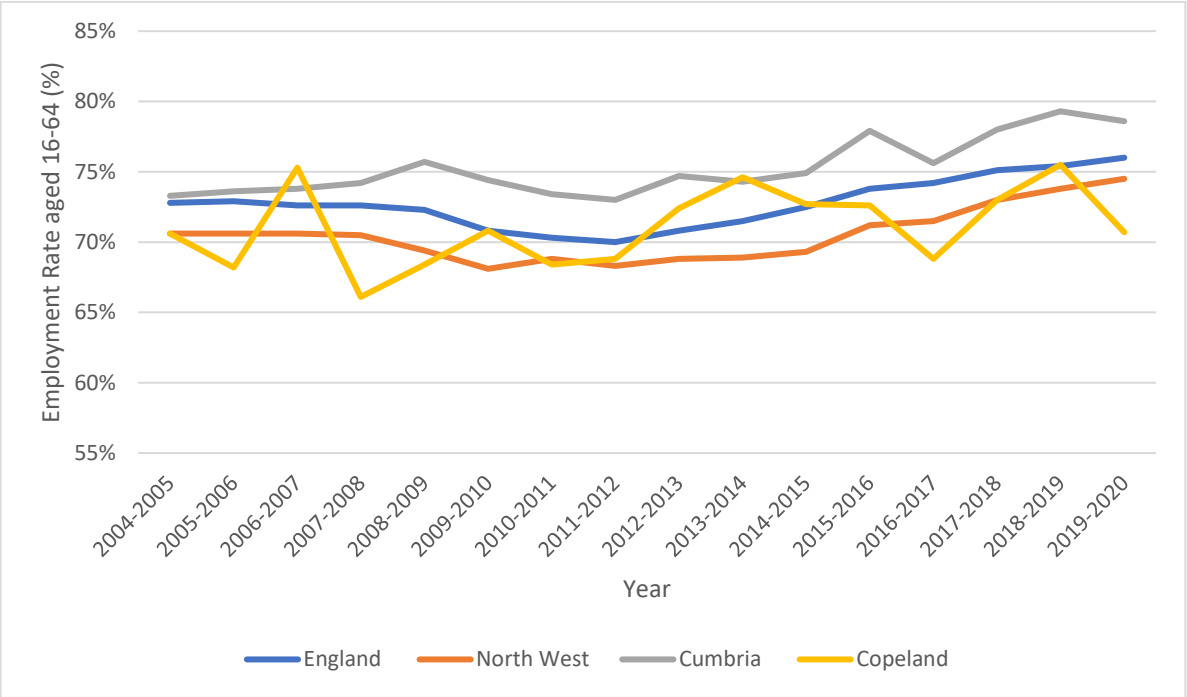
Sector	GVA 2018 (£million)	% of total
Agriculture, mining, electricity, gas, water and waste	89	5.38%
Manufacturing	601	36.34%
Construction	111	6.71%
Wholesale and retail trade; repair of motor vehicles	78	4.72%
Transportation and storage	23	1.39%
Accommodation and food service activities	32	1.93%
Information and communication	11	0.67%
Financial and insurance activities	14	0.85%
Real estate activities	144	8.71%
Professional, scientific and technical activities	106	6.41%
Administrative and support service activities	108	6.53%
Public administration and defence	122	7.38%
Education	59	3.57%
Human health and social work activities	115	6.95%
Arts, entertainment and recreation	18	1.09%
Other service activities	15	0.91%
Activities of households	8	0.48%
All industries	1,654	100%

Source: ONS, 2019. GVA (balanced) current prices

b) Employment Rates

5.10 The figure below shows the trend in total employment since 2004. This shows that employment in Copeland has fluctuated and at present (2019/20) is lower than the national and regional level.

Figure 10. Employment Rate aged 16-64 (%)



Source: Annual Population Survey

5.11 The table below shows the level of self-employment as a percentage of total employment for Copeland compared to regional and national rates.

5.12 In Copeland, 8.1% of workers are self-employed this is fairly similar to the North West level of 9.4% but is relatively low compared to the Cumbria and England levels of 13.5% and 10.6% respectively.

Table 12. Self – Employment

	% aged 16-64 who are self-employed (2019)
Copeland	8.1%
Cumbria	13.5%
North West	9.4%
England	10.6%

Source: Annual Population Survey

c) Business Demography

5.13 Copeland's business composition is broadly in line with the county, regional, and national proportions as shown in Table 13. In Copeland, 0.35% of businesses have 250+ employees, this is higher than Cumbria at 0.25%, but lower than the North West at 0.43%.

5.14 The majority of businesses in Copeland have between 0-9 employees at 85.49%, this is slightly higher than the Cumbrian, North West, and England levels.

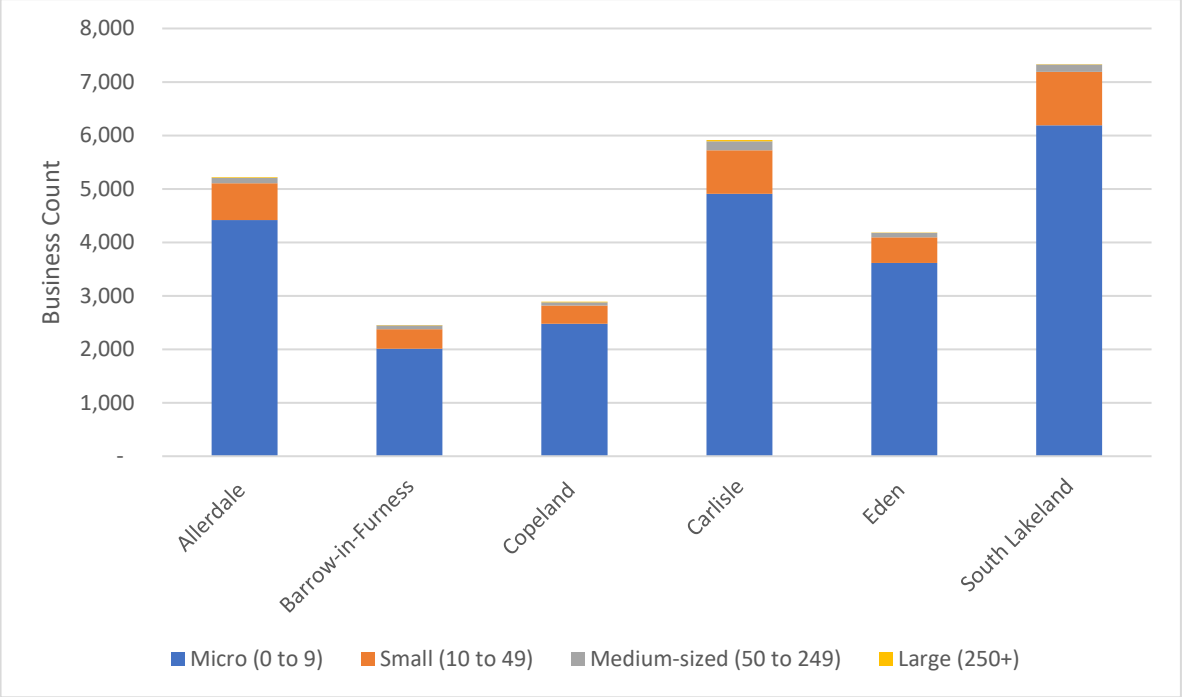
Table 13. Business Composition

	Micro (0 to 9)	Small (10 to 49)	Medium (50 to 249)	Large (250+)
Copeland	85.49%	11.92%	2.07%	0.35%
Cumbria	84.37%	13.20%	2.18%	0.25%
North West	83.34%	13.34%	2.88%	0.43%
England	84.89%	12.17%	2.56%	0.38%

Source: BRES, 2020

5.15 Copeland is currently (as of 2020) home to 2,895 businesses. Figure 11 shows this is somewhat lower than the other Cumbria authorities such as Allerdale, Carlisle, Eden, and South Lakeland, and slightly higher than the neighbouring authority of Barrow-in-Furness.

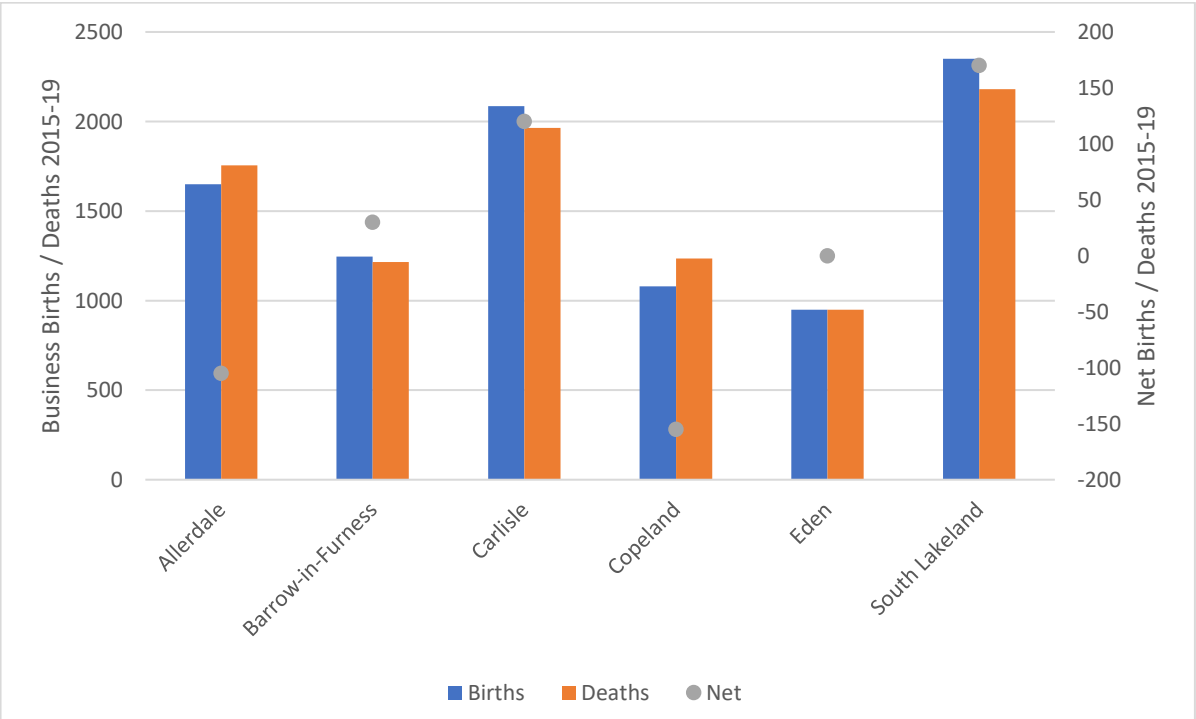
Figure 11. Business Composition – Cumbrian Authorities



Source: BRES, 2020

5.16 The figure below breaks down the business birth and deaths over the most recent five-year period (2015-19). Over this period there has been an average of 1,080 new businesses per annum and 1,235 business deaths per annum in Copeland. This equates to a net loss of 155 businesses over this period, and 31 losses per annum.

Figure 12. Businesses Births and Deaths (2015-2019)



Source: ONS, 2019

d) Sectoral Breakdown

5.17 Analysis of the Business Registration and Employment Survey (BRES) data has been undertaken to identify the sector breakdown of businesses in Copeland. The table below identifies that the top 5 sectors in Copeland are: manufacturing (33.4%), health (11.1%), professional, scientific and technical (6.9%), retail (6.3%), accommodation and food services (5.6%), business administration and support services (5.6%), public administration and defence (5.6%).

5.18 With regard to the LEP's key sectors, the data reveals the following sectors are the most prominent employers:

- Manufacturing 33.4%
- Health 11.1%
- Construction 6.9%
- Professional, scientific, and technical services 6.9%

Table 14. Composition of Employment, 2019

	Count	Percentage
1 : Agriculture, forestry & fishing	1,500	4.2%
2 : Mining, quarrying & utilities	350	1.0%
3 : Manufacturing	12,000	33.4%
4 : Construction	2,500	6.9%
5 : Motor trades	400	1.1%
6 : Wholesale	400	1.1%
7 : Retail	2,250	6.3%
8 : Transport & storage (inc postal)	800	2.2%
9 : Accommodation & food services	2,000	5.6%
10 : Information & communication	200	0.6%
11 : Financial & insurance	150	0.4%
12 : Property	175	0.5%
13 : Professional, scientific & technical	2,500	6.9%
14 : Business administration & support services	2,000	5.6%
15 : Public administration & defence	2,000	5.6%
16 : Education	1,750	4.9%
17 : Health	4,000	11.1%
18 : Arts, entertainment, recreation & other services	1,000	2.8%
Total	35,975	100.0%

Source: BRES, 2019

5.19 A Location Quotient analysis has been used to further analyse the composition of employment in Copeland and to identify specialisms within the local economy. A Location Quotient (LQ) describes the proportion of employment in a sector relative to a wider area, in this case Cumbria and England.

5.20 A LQ of 1.0 means there is the same proportion of employment in this sector in Copeland as is the case across the comparator area. An LQ above 1 means there is a higher concentration of employment in that sector within the local economy for example an LQ of 2.0 equates to twice the proportion of employment in the identified sector compared to England as a whole. Conversely, an LQ of less than 1.0 means a relatively lower concentration of employment.

5.21 The LQ analysis detailed in the table below identifies the following:

- There is a particular strength in manufacturing in Copeland compared to both the Cumbrian and England average. Note that this figure includes all jobs at the Sellafield site which are counted as Manufacturing of basic metals.
- Compared to England, Copeland has strengths in Agriculture, forestry and fishing. However compared to Cumbria the concentration of employment in this sector is fairly low, likely due to high concentration of agriculture activities in the lake district.
- The Professional, scientific and technical sector and the Business administration and support services sector have relatively strong representation in Copeland compared to the Cumbria average. This represents the higher concentration of businesses in these sectors within the Sellafield supply chain. However, Copeland has a lower LQ in these sectors compared to the England average, due to the strong representation of these sectors within England's major cities.
- The Construction sector is strong in Copeland relative to both the region and the national rate. This is strongly driven by specialist construction activities related to Sellafield.
- The sectors relating to hospitality and tourism – the Accommodation & food services sector, Retail sector, and the Arts, entertainment, recreation sector – all have low representation compared to regional and national rates.

Table 15. Location Quotient Broad Sector Specialisms – Copeland vs Cumbria and England, 2019

	Copeland vs. Cumbria	Copeland vs. England
Agriculture, forestry & fishing (A)	0.77	3.17
Mining, quarrying & utilities (B,D and E)	0.83	0.87
Manufacturing (C)	2.20	4.29
Construction (F)	1.28	1.39
Motor trades (Part G)	0.41	0.58
Wholesale (Part G)	0.41	0.28
Retail (Part G)	0.60	0.68
Transport & storage (inc postal) (H)	0.48	0.45
Accommodation & food services (I)	0.51	0.74
Information & communication (J)	0.48	0.13
Financial & insurance (K)	0.43	0.12
Property (L)	0.36	0.24
Professional, scientific & technical (M)	1.19	0.76
Business administration & support services (N)	1.10	0.63
Public administration & defence (O)	1.30	1.42
Education (P)	0.83	0.58
Health (Q)	0.89	0.90
Arts, entertainment, recreation & other services (R,S,T,U)	0.65	0.60

e) Summary

5.22 This section provides a baseline assessment of the local and regional economic dynamics in Copeland.

5.23 The local economy currently supports around 35,900 jobs, and has seen strong economic

growth since 2009 whereby productivity (GVA per head) exceeds the Cumbrian and North West levels.

5.24 The business demography in Copeland is broadly in line with national, regional, and county proportions. In Copeland, the majority of businesses are small businesses with between 0 and 9 employees at 85.49% which is very slightly higher than the Cumbrian, North West, and National levels.

5.25 Copeland has particularly high proportions of jobs in the Manufacturing sector, accounting for 33.36% of jobs of which 83% are at Sellafield, compared to 7.78% nationally. Another sectoral strength is agriculture, forestry and fishing with 4.17% in this sector, this is lower than the Cumbrian average at 5.45% but notably higher than the North West and English average at 1.09% and 1.31% respectively.

5.26 Other sectors with relative local strengths are the Professional, scientific and technical sector and the Business administration and support services sector which both have relatively strong representation in Copeland compared to the Cumbria average. This represents the higher concentration of businesses in these sectors within the Sellafield supply chain. However, Copeland has a lower LQ in these sectors compared to the England average, due to the strong representation of these sectors within England's major cities.

5.27 The Construction sector is strong in Copeland relative to both the region and the national rate. This is strongly driven by specialist construction activities related to Sellafield.

5.28 However, the sectors relating to hospitality and tourism – the Accommodation & food services sector, Retail sector, and the Arts, entertainment, recreation sector – all have low representation compared to regional and national rates.

6.0 COMMERCIAL MARKET SIGNALS AND COMPLETIONS TRENDS

a) Qualitative Assessment of the Commercial Property Market

6.1 The analysis has been informed by stakeholder engagement with the Local Enterprise Partnership, key businesses and employers, commercial property agents and developers, and inward investment partners.

6.2 Informal interviews were undertaken via phone and internet with this wide range of stakeholders. These interviews were semi-structured around a number of broad themes relating to Copeland's economic geography, current market performance and business requirements, and future opportunities and threats to growth. A summary of feedback received is set out below.

i) *Copeland's Economic Geography*

6.3 Copeland's economic geography is focussed in the north-west of the borough, with the A595 corridor from Calder Bridge northwards being considered the most attractive locations for commercial activity, and hence the locations in greatest demand for employment space.

6.4 This is due to the combination of access to existing centres of employment in the borough at Sellafield itself, Whitehaven, Cleator Moor, and Westlakes Science and Technology Park; and access to the A595 providing transport links further afield.

6.5 Some interviewees considered the most attractive employment locations to fall between Calder Bridge and Whitehaven, as transportation links through Whitehaven itself can be difficult. However, others considered sites up to Lillyhall – i.e. including the whole of the A595 corridor within Copeland borough – as attractive locations and Whitehaven was less of a barrier.

6.6 In addition to Whitehaven and Calder Bridge, the settlements of Cleator Moor, Egremont, and Bigrigg were identified as suitable locations, as well as the employment sites at Westlakes and Lillyhall (in Allerdale Borough).

6.7 It was unanimously considered that there was very little demand in the south of the borough – including at Millom – and little demand in the area covered by the National Park (although this is beyond the Local Plan area). These areas were considered to have very local markets and are unlikely to see significant future employment development.

6.8 The most important factor affecting the commercial attractiveness of employment sites is proximity and access to the A595. However, it was reported that currently there is an undersupply of sites within such locations which provide this. Westlakes is one such site but, as set out below, this caters to a very specific segment of the market and is not available for the range of general employment uses.

6.9 Cleator Moor was highlighted as a key employment location given its existing concentration of industrial uses and proximity to both Sellafield and Westlakes. However, the town is located further from the A595 than other settlements and road access via residential areas lessens its commercial attractiveness. Nonetheless, it remains one of the most attractive employment locations within Copeland and is one of the primary locations for Sellafield supply chain companies – the other being Westlakes.

6.10 Within Cleator Moor, the primary employment location is Leconfield Industrial Estate which has recently been acquired by the Council in 2021. It has been in private ownership since the 1980s but with no recent investment. The Council has intervened, partially through grant funding and partially though capital investment, to redevelop the site to create the Industrial Solutions Hub (ISH). More details of this development are set out in the future opportunities section below.

6.11 Funding was recently announced for the redevelopment of the Cleator Mills site which will bring the existing buildings back into use as office space. This is expected to be taken up by Sellafield to support their programme of off-siting.

6.12 The main reasons given for businesses locating in Cleator Moor were the lower levels of rent, which undercut Westlakes Science Park, albeit providing a less premium environment. The other key attraction was free parking and space to park vehicles overnight. Internet bandwidth was also cited as a key consideration for business location.

6.13 Westlakes Science Park provides a very different employment offer to anything else in the borough, providing a premium business park focussed around high-end engineering firms strongly linked to the Sellafield supply chain. The park provides a very high quality environment and premises and is home to a significant number of national and international engineering companies.

6.14 Westlakes provides an important differentiation from the other existing employment sites in the borough. Occupancy rates are good, however there has been little in the way of recent development at the site although there remains scope for further expansion. However, this will most likely only be suitable for further expansion of similar high-end engineering and similar uses relating to Sellafield and related industries, and will not be suitable to support a wide range general employment uses.

6.15 Conversely, the disbenefit of Westlakes, cited by respondents, was the lack of nearby amenities and facilities, which are present in sites located within the settlements – such as shops, gyms, and other town centre uses. Some respondents thought these uses would improve the quality of life offer and attractiveness of Westlakes.

6.16 Whitehaven is the largest town centre in Copeland and the largest retail and leisure destination. It is also home to a significant quantum of office space and the focus of several regeneration projects. Albion Square has been the largest and most prominent office development in recent years which now provides accommodation for around 600-700 office workers, all of which has been taken up by Sellafield in support of their programme of off-siting.

6.17 Two pipeline developments in Whitehaven are expected to deliver significant quanta of new office space. The redevelopment of the former bus station site – called the Buzz Station – has recently been completed. This will supply a range of flexible workspaces aimed at supporting SME businesses and support development of new businesses, entrepreneurs, and new ventures.

6.18 The plans for the North Shore redevelopment of Whitehaven's harbourside will create a new leisure, employment, and hospitality destination comprising 75,000 sqft of office space. The proposed new office space was initially to be taken up by Sellafield to further support their off-siting requirements. However, we understand this has not been decided and there are a number of possible alternative uses for the space, including for the location of a big data campus linked to the digital grid and smart city technology, or linked to the development of an AI campus in the north of England.

6.19 To the north of Whitehaven, potential occupiers will look as far north as Lillyhall. This is due, in part, to the lack of existing sites within Copeland between Whitehaven and Lillyhall. Furthermore, the recently permitted expansion of the Lillyhall site is likely to absorb the majority of activity in this area within the short-term at least.

6.20 The south of Borough is characterised as a primarily rural area with Millom the only settlement of any size being mainly residential with some retail demand. The majority of employment demand for this area is either absorbed at Sellafield or in the related supply chain – which is better served in the northern part of the district as set out above, or to the

South in Barrow in Furness where there is a significant concentration of employment jobs and land. As a result, the demand for employment in the southern part of the borough is considered to be limited to a very local market.

6.21 Looking beyond Copeland, respondents reported that if there are no suitable sites in Copeland, potential occupiers are forced to look further afield and the only other viable option for locally based businesses would be at Lillyhall in Allerdale. For the larger businesses relating to the Sellafield supply chain, they are generally regional or national companies and would more likely focus on expanding at other locations.

ii) *Current Employment Premises Requirements*

6.22 Copeland's industrial premises requirements are generally split between demand from local businesses, and demand from businesses directly within the Sellafield supply chain. Sellafield's supply chain spending is disaggregated into Tier 2 spending – which is companies receiving the first round of supply chain spending directly from Sellafield Ltd, and Tier 3 spending – which is companies receiving supply chain spending from Tier 2 companies.

6.23 However, when identifying the needs for 'local demand' in Copeland – i.e. that unrelated to the Sellafield supply chain – it is clear that the majority of businesses which occupy employment (office/industrial/warehouse) space in Copeland are interlinked with the supply chain at some point. For example, local business services (e.g. printing or signage) or construction businesses will rely on a range of Tier 2 and Tier 3 companies, as a result of the high representation of such businesses in Copeland's economy.

6.24 Therefore it is difficult to disentangle the local from the supply chain needs. Indeed the majority of employment sites comprise a mix of these uses. Nonetheless, there is a clear differentiation in the requirements at the different ends of the market, with Westlakes for example, predominantly meeting the needs of the high-end Tier 2 companies.

6.25 Respondents reported that currently there is a need for smaller industrial and workshop units across Copeland. There have been a number of examples in recent years of larger occupiers vacating large premises which is unable to be relet as a single space, but instead of subdivision into several smaller units, the unit has been subject to change of use to a non-employment use instead and the employment use lost.

6.26 It is currently difficult to find smaller workshop space in Copeland which cater for the smaller local business needs. There is currently an undersupply of industrial space and as a result businesses are looking towards Lillyhall to meet their requirements.

6.27 Enquires for smaller industrial units are currently outstripping demand. Most in demand are small lock-up units with roller shutters and yardspace which provide overnight parking. This includes demand from traditional industrial users such as manufacturing, and construction, but also creative arts and printing.

6.28 This pressure on industrial space is also impacting on the supply chain companies who similarly require small industrial units. This particularly affects the smaller/medium size Tier 3 companies.

6.29 There is also a lack of larger space for these companies to move into as they grow (beyond around 40-50 employees in size). Several examples were cited of businesses of this size having to move out of Copeland to Lillyhall in order to support their expansion requirements.

6.30 For the office sector, respondents report that there is not an undersupply of office space as there is for industrial floorspace. The most significant factor affecting Copeland's office supply is the volume of take-up of office space by Sellafield Ltd. This process has been cited as a key dynamic for Copeland's office market in recent years. The majority of new office

space coming onto the market, particualy that of any size, has been taken up by Sellafield.

6.31 Conversely, in order to secure the most cost-effective use of public funds, Sellafield are required to find the most cost-effective solutions to meeting their accommodation requirements which means their priority is to look towards public estate property, then towards the rental market, and lastly towards commissioning new office space.

iii) *Future Trends, Opportunities and threats*

6.32 Sellafield and its related supply chain is identified by the majority of stakeholders as providing the greatest opportunity for Copeland's future economic growth, but also provides the biggest threats. This is somewhat inevitable given the scale of impact Sellafield has on Copeland's economy.

6.33 Sellafield has been a long-term, high volume employer both employing considerable numbers directly and supporting a large local supply chain. It is a driver of high productivity jobs, again both directly on site and within its extensive and diverse supply chain, and supports higher than average wages.

6.34 The mission at Sellafield – the continuing decommissioning of the site – provides a reliable and long-term source of employment opportunities extending well beyond the lifetime of the Local Plan. The current operations at the site are constantly evolving and are changing from the operation of nuclear reprocessing plant to high hazard and risk reduction.

6.35 Throughout this ongoing process of change, there are changing requirements of both the land use and the labour force required at the Site itself and to support operational activity. It was previously expected that this would result in job losses – the 2017 Oxford Economics report anticipated the loss of 1,500-2,000 jobs over the next 4-5 years. However, this has not materialised, with workers instead being redeployed to other roles.

6.36 Over the next 10-to-15-year period the mission at Sellafield will refocus towards manufacturing waste packages and storing them on site. From 2035 onwards the mission is expected to shift toward waste management and potentially waste export.

6.37 This process will involve the significant rationalisation of assets at the Sellafield site. This will include the relocation of non-essential site workers into alternative off-site accommodation, and an extensive programme of demolition and construction to facilitate the changing operational requirements on site. Sellafield is aiming to deliver 17 major new construction projects by 2038 – with an estimated cost of around £7billion. This construction work will support a considerable quantum of employment both directly at the site and across a range of supply chain sectors including manufacturing, construction, project management, and business services.

6.38 It is anticipated that Sellafield will continue to support direct employment on site and within the extensive supply chain up to 2035. Oxford Economics' 2017 report estimates that Sellafield Ltd is responsible for sustaining an estimated 58.7% of local jobs in Copeland accounting for direct jobs at the site, indirect jobs within the supply chain, and induced jobs due to wage expenditure within the local area.

6.39 However, while Sellafield clearly provides a significant opportunity in terms of supply chain contracts, it is less clear the extent to which this is directly supporting local employment. Currently, a considerable number of the Tier 2 contracts – i.e. those coming directly from Sellafield – are won by larger national or multinational companies and several stakeholders reported that it is difficult for SMEs to compete. However, the statistics – such as those in the OE report – show a considerable number of contracts are granted to national or multinational companies who have a branch in Copeland. This means they qualify as 'local' businesses and meet the social benefits and local employment criteria. However, often only a small proportion of the contract is fulfilled by the Copeland branch, with significant elements fulfilled

at other locations. This means that the level of local employment actually delivered through these contracts can be considerably smaller than that implied by the scale of contracts granted to 'local' businesses. Evidence given for this is for example the amount of new employment floorspace development seen at Westlakes where there has not been any significant development in the past ten years.

6.40 One of the key messages from the stakeholder engagement is that the greatest opportunity for economic growth in Copeland is focussing on capture and retain a greater proportion of the supply chain opportunities from Sellafield.

6.41 The Programme and Project Partners (PPP) model was launched in 2019 and aims to revolutionise the approach to procurement and project delivery at Sellafield. PPP includes new rules around social contracts for procurement which Sellafield is bound by and new mechanisms designed to ensure local and SME businesses have access to frameworks and contracts.

6.42 However, there is a risk associated with the Borough's economy being so closely linked to a single operator and the major growth opportunities tied to its supply chain. A supply chain with a high dependence on a single organisation provides a very narrow market often with little or no market diversification. Sellafield, as a publicly funded entity are duty bound to seek cost efficiency within their operational approach. This requires seeking value for money from contracts. This provides an opportunity insofar as it supports innovation, but also a threat in that it can drive cost reduction in a market with little resilience.

6.43 Nonetheless, this should provide future opportunities for more work coming out of Sellafield to be retained by businesses in Copeland. The Council has commenced work in partnership with Sellafield Ltd on developing the Industrial Solutions Hub (ISH) at Leconfield Industrial Estate in Cleator Moor in order to support this aim, as well as strengthen the resilience within the supply chain to strengthen future prospects.

6.44 The ISH will provide a spatial location which will not only see the redevelopment of the industrial estate to attract and support the growth of businesses within the supply chain. It will also provide a central hub with a wide range of export support and business support services.

6.45 The aims of the ISH is to create a business cluster focussed, at least initially, around the Sellafield supply chain, but with the potential to expand this remit to cover the whole clean energy sector. The ISH cluster concept differentiates from the existing supply chain model in Copeland which is characterised as a trade association around a dominant customer, rather than a true business cluster. The latter typically providing and utilising a greater degree of cross working, shared ideas, facilities, and services.

6.46 The ISH initial remit will be to support and enable companies who already supply Sellafield to do so more effectively. The aim is to mutually benefit to Sellafield and the suppliers. Longer term the aim is to help diversify the supply chain into new markets and add resilience. Much of what is happening at Sellafield and the related supply chain is world leading and the ISH aims to support the export of these leading services to wider markets beyond Sellafield.

6.47 Longer-term, and subject to the success of the ISH at Leconfield, there is potential to develop multiple ISH campuses. Another potential growth sector identified in the stakeholder interviews in the advanced robotics, artificial intelligence (AI), and control systems. These sub-sectors are strongly linked with the challenges with nuclear fusion and nuclear decommissioning and as such there are clear linkages with the mission at Sellafield and the proposed developments at the Clean Energy Park. We understand there are advanced discussions regarding the potential development of a cluster around these sectors, although currently there are currently no firm commitments. An example for a similar type of development is the Culham Science Centre in Oxfordshire which is home to the UKAEA

RACE (Remote Applications in Challenging Environments).

b) Quantitative Indicators of the Commercial Market

6.48 The table below shows the overall quantum of office and industrial floorspace the authorities as shown by data from the Valuation Office Agency (VOA). The VOA data is divided into Office (formerly B1 use class and now covered by E Class) and Industrial (which includes both B2 and B8) use classes.

6.49 The data shows there is a total of 184,000 sqm of industrial floorspace in Copeland as of 2020, and 71,000 sqm of office floorspace. The VOA data shows that since 2001 there has been a net loss of 64,000 sqm -26% of office floorspace, and growth of 28,000 sqm and 65% of industrial floorspace.

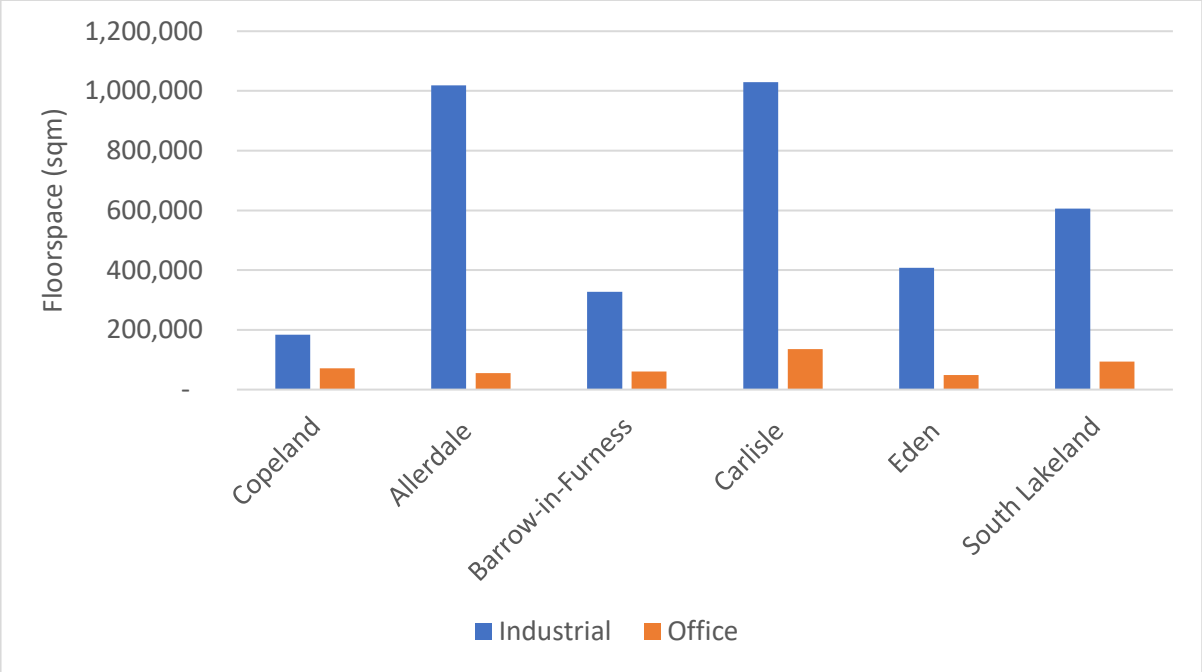
Table 16. Total Commercial Floorspace, Copeland

	Floorspace 2019/20 (sqm)	% change 2000/01 to 2019/20	Change 2000/01 to 2019/20 (sqm)
Industrial	184,000	+65%	28,000
Office	71,000	-26%	-64,000

Source: VOA

6.50 The figure below provides a comparison of the scale of employment floorspace between Copeland and neighbouring areas within Cumbria. This shows that Copeland has a significantly lower amount of Industrial floorspace compared to the other authorities in Cumbria. With regard to office floorspace, Copeland has higher floorspace area than Allerdale, Barrow-in-Furness, and Eden, and is lower than Carlisle and South Lakeland.

Figure 13. Commercial Space, 2020 – Cumbria



Source: VOA

6.51 Figure 14 is a map showing the location of office and industrial floorspace in Copeland as recorded by the VOA, and shows the quantum of commercial floorspace aggregated by Lower Super Output Area (LSOA).

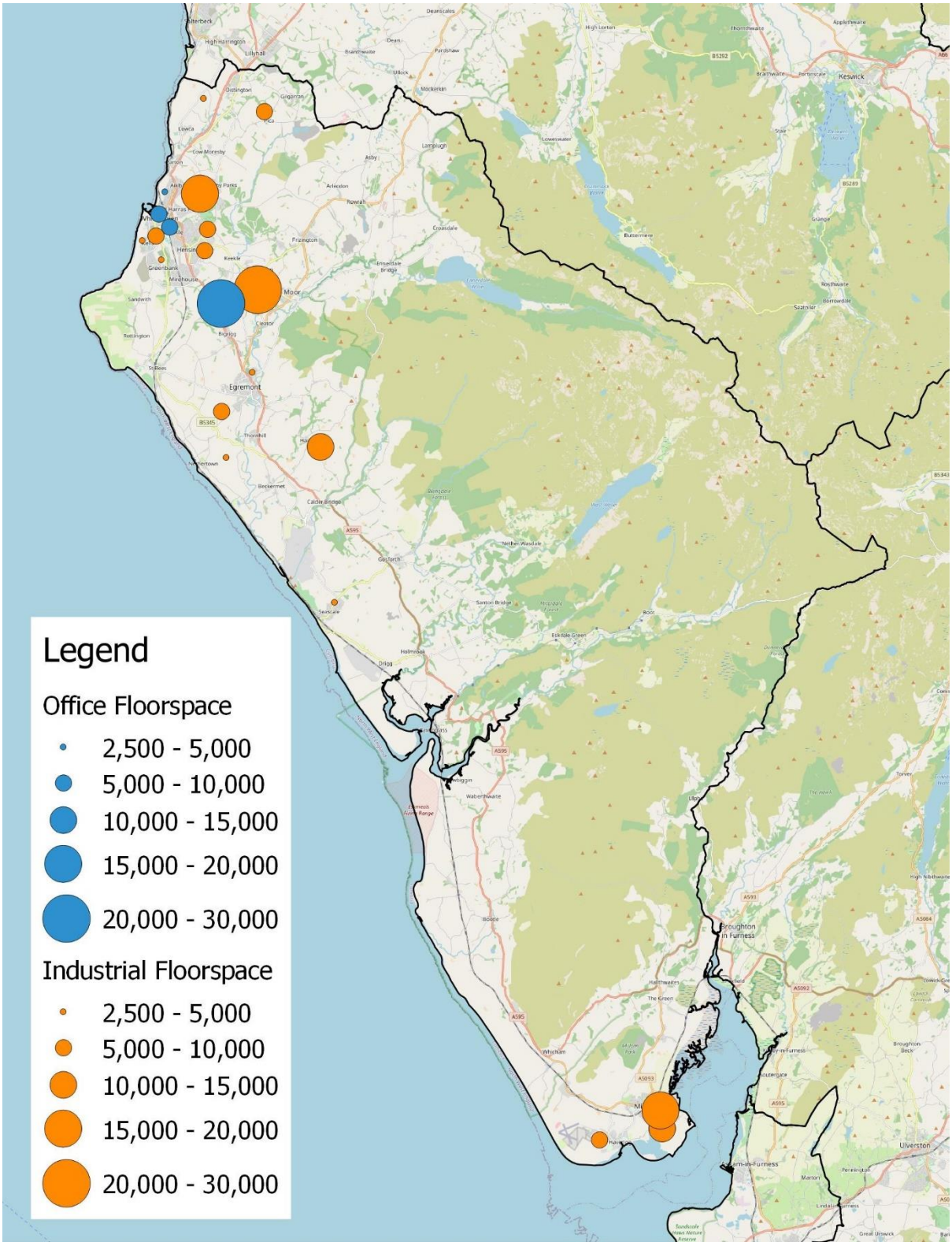
6.52 The data shows that there are three main commercial centres in Copeland:

- Cleater Moor: shown on the map as the largest single concentration of industrial uses, focussed at Leconfield Industrial Estate.
- Westlakes Science and Technology Park: shown on the map as the largest single concentration of office uses.
- Whitehaven: comprises a mix of office and industrial uses across a range of sites with office uses more concentrated within the town centre and industrial uses towards the edge of centre including industrial estates such as Moresby Parks.

6.53 The VOA data does not include the Sellafield Ltd site within its data, but in terms of scale of employment this would certainly constitute a fourth centre of employment in Copeland.

6.54 The map corroborates the findings of the qualitative assessment that the majority of commercial activity is focused in the northern part of the borough. In the south, activity is focussed at Millom and this is mainly industrial type uses.

Figure 14. Copeland Commercial Floorspace by Location



Source: SPRU analysis of VOA data

c) Industrial Floorspace Vacancies

6.55 We have collated details of industrial floorspace being advertised on Estates Gazettes Property Link and CoStar's Realla commercial property listing websites. This has identified that as of May 2021, a total of 1,331 sqm of industrial space is being advertised across 5 developments in Copeland.

Table 17. Industrial Vacancy Rate in Copeland

	Floorspace (sqm)
Total Industrial Vacancies	1,331
Total Industrial Stock	184,000
Industrial Vacancy Rate	**0.72%**

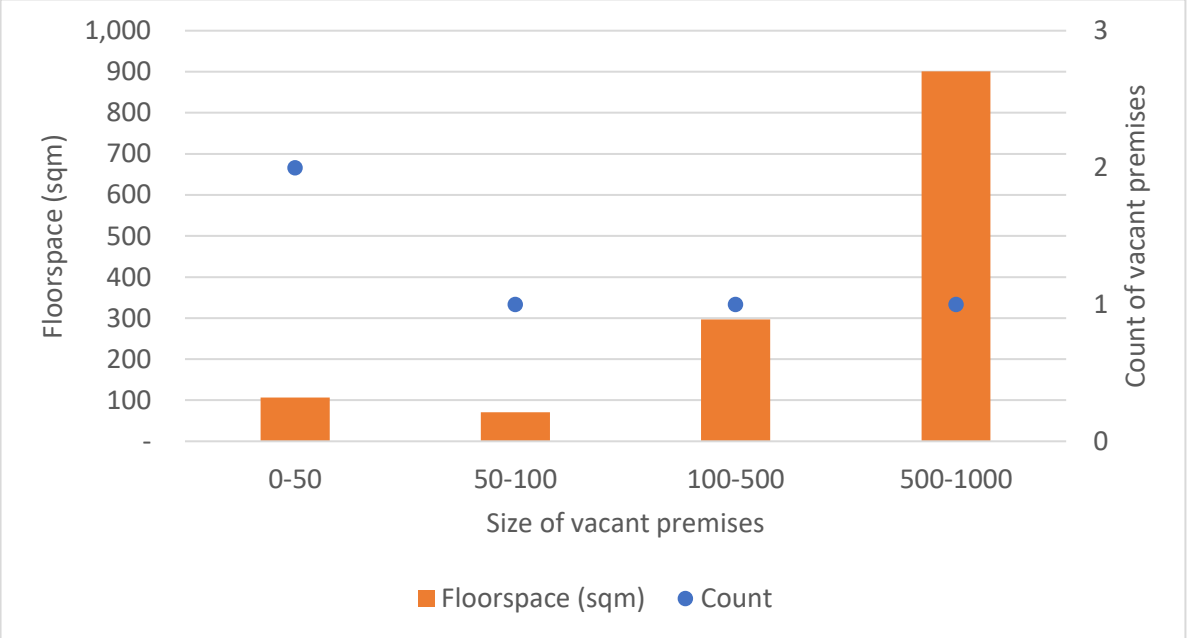
Source: SPRU Analysis of VOA Estates Gazettes and CoStar data

6.56 The advertised available space in Copeland equates to 0.72% of existing stock. This provides a snapshot of the vacancies at one point in time. However, a guideline healthy vacancy rate is considered to be around 7.5%, therefore, Copeland has a tight supply of premises to meet the demand.

6.57 However, it is important to note that this analysis has been undertaken whilst there is still COVID restrictions and therefore, it has been suggested that many businesses have put decisions regarding relocation / expansion on hold during this period and decisions on taking on new premises have been deferred. This suggests that marketing activity may have been lower than usual during this period.

6.58 The figure below shows the industrial vacancies by size. This shows that the vacant industrial premises range from 26.94 sqm to 900.59 sqm.

Figure 15. Industrial Vacancies, April 2020



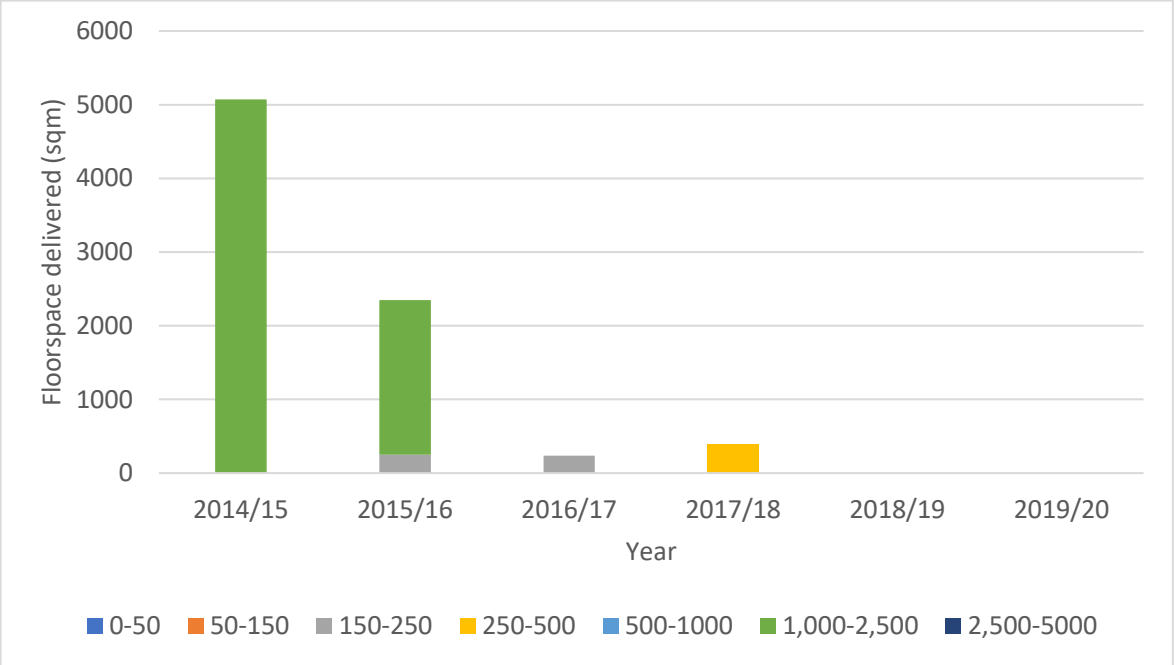
Source: SPRU analysis of Estates Gazettes and CoStar data

d) The Recent Pattern of Industrial Land Supply and Loss

6.59 Since 2014/15, 6,527sqm of industrial land has been delivered in Copeland, equating to an average of 1,088sqm per annum. This is based on data provided by the Council.

6.60 The figure below shows the completions per year per size bands. This shows that the majority of industrial land delivered over the land 7 years was in 2014/15 and 2015/16 on sites between 1,000-2,500 sqm.

Figure 16. Industrial Floorspace Gains – by Year and Size Band (2014/15-2019/20)



Source: SPRU analysis of Local Authority Monitoring Data

6.61 The table below shows that the delivery of 6,527 sqm is equivalent to a growth rate of 0.59%. This is below the 1% per annum that is generally held as a healthy growth rate.

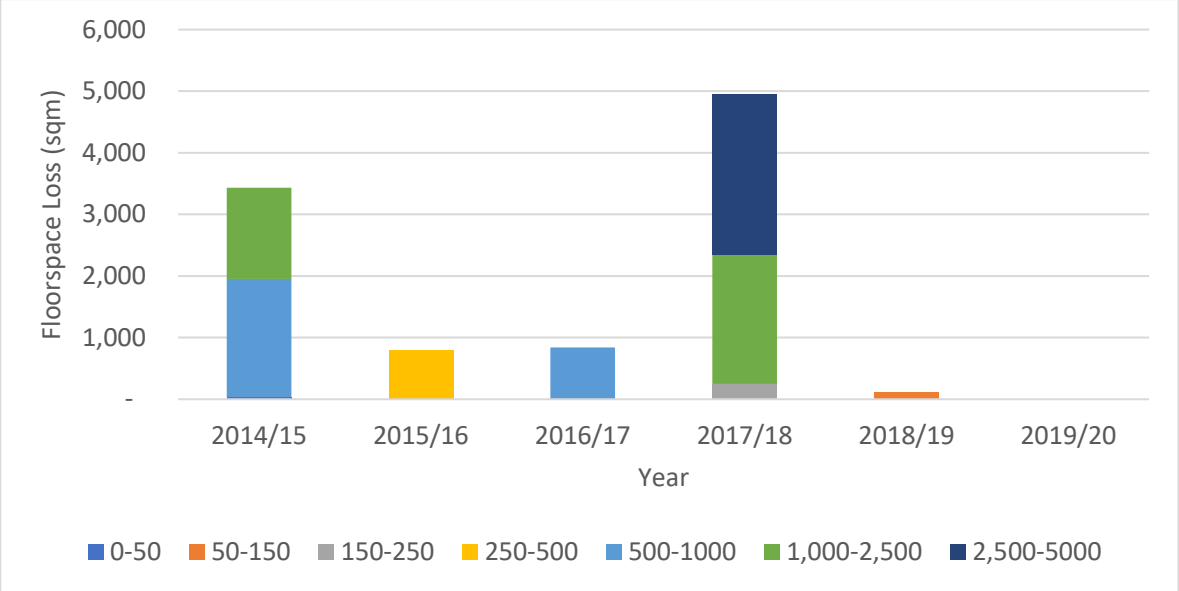
Table 18. Industrial Completions vs Industrial Stock

Year	Industrial Floorspace (sqm)
2014/15 to 2019/20	6,527
Gross gains per annum	1,088
2019 Stock	184,000
Percentage growth per annum	**0.59%**

Source: SPRU analysis of Local Authority Monitoring Data

6.62 Since 2014 there has been 10,150 sqm of industrial floor space lost, as shown in Figure 17.

Figure 17. Industrial Floorspace Loss (sqm) (2014/15 to 2019/20)



Source: SPRU analysis of Local Authority Monitoring Data

6.63 Comparing the losses and completions, shows that between 2014/15 and 2019/20 there has been a net loss of 3,623 sqm of industrial floorspace. This is reflective of the viability issues in delivering industrial floorspace as raised in the stakeholder consultation.

Table 19. Net Industrial Floorspace Delivery (sqm) (2014/15 to 2020/21)

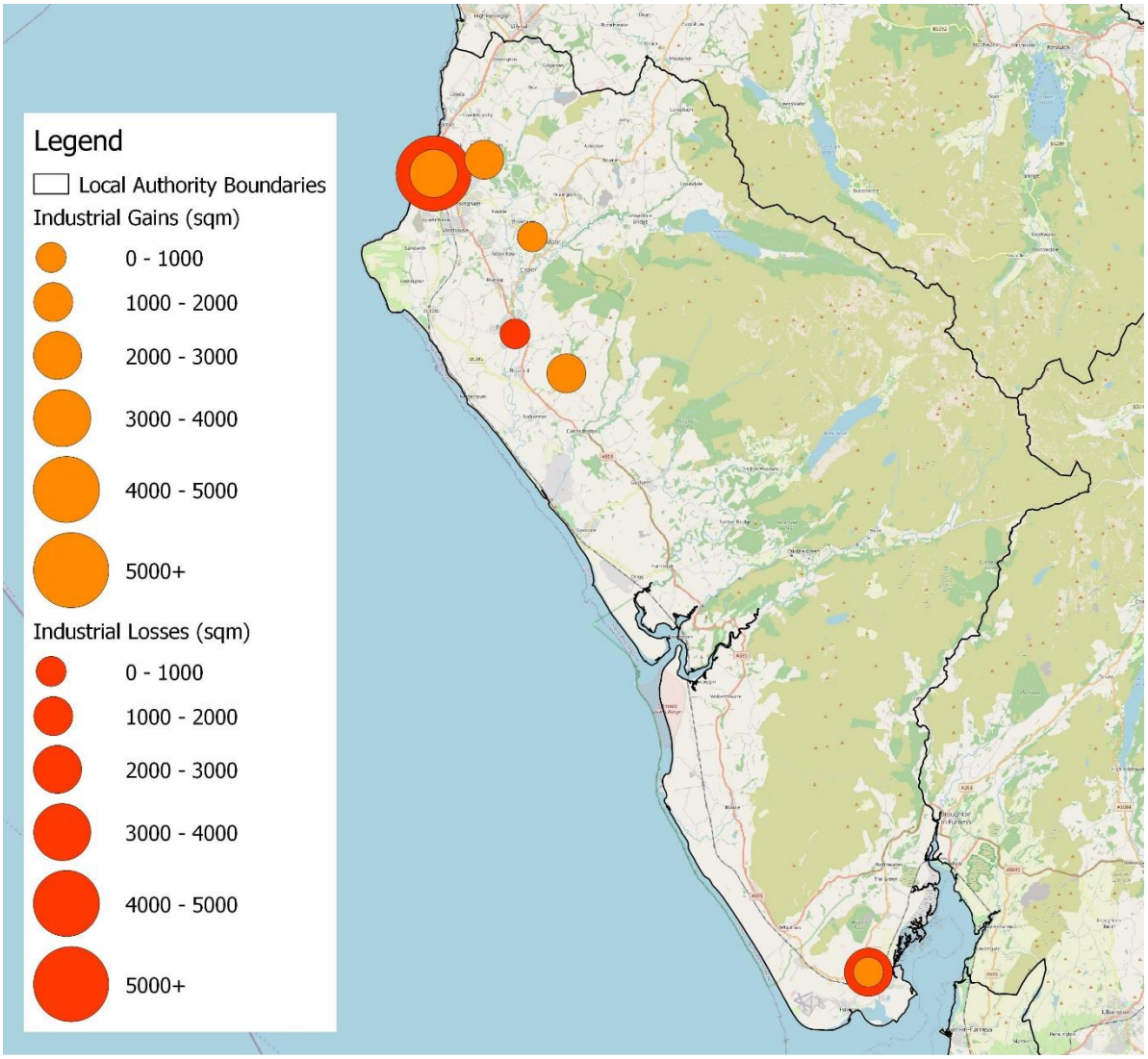
	Completions (sqm)	Losses (sqm)	Net completions/losses (sqm)
2014/15	3,550	- 3,433	117
2015/16	2,349	- 801	1,548
2016/17	238	- 842	- 604
2017/18	390	- 4,954	- 4,564
2018/19	0	- 120	- 120
2019/20	0	0	0
Total	6,527	-10,150	-3,623

Source: SPRU analysis of Local Authority Monitoring Data

6.64 The completions and losses figures in the table above are shown geographically in the map overleaf. This shows that the greatest industrial activity has been in Whitehaven (including the nearby Moresby Parks on the edge of Whitehaven) where there has been the greatest quantum of both gains and losses of industrial floorspace over this period. Overall there has been a net loss of industrial space in Whitehaven reflecting a considerable quantum of dated stock, but also the largest development of new floorspace in Copeland indicating a demand for new modern space.

6.65 The map also shows industrial developments in Cleator Moor, Millom, and Haile, as well as losses in Millom and modest losses in Egremont over this period. This reflects the findings of the qualitative analysis that the majority of industrial activity in Copeland is focussed in the north of the borough.

Figure 18. Industrial Gains and Losses by Location (2014/15 to 2020/21)



Source: SPRU analysis of CBC data

e) Office Floorspace Vacancies

6.66 We have collated details of office floorspace being advertised on Estates Gazettes Property Link and CoStar's Realla commercial property listing websites. This has identified that as of May 2021, a total of 6,385 sqm of office floorspace is being advertised across 22 units.

Table 20. Office Vacancy Rate in Copeland

	Floorspace (sqm)
Total Office Vacancies	6,385
Total Office Stock	71,000
Industrial Office Rate	**8.99%**

Source: SPRU Analysis of VOA Estates Gazettes and CoStar data

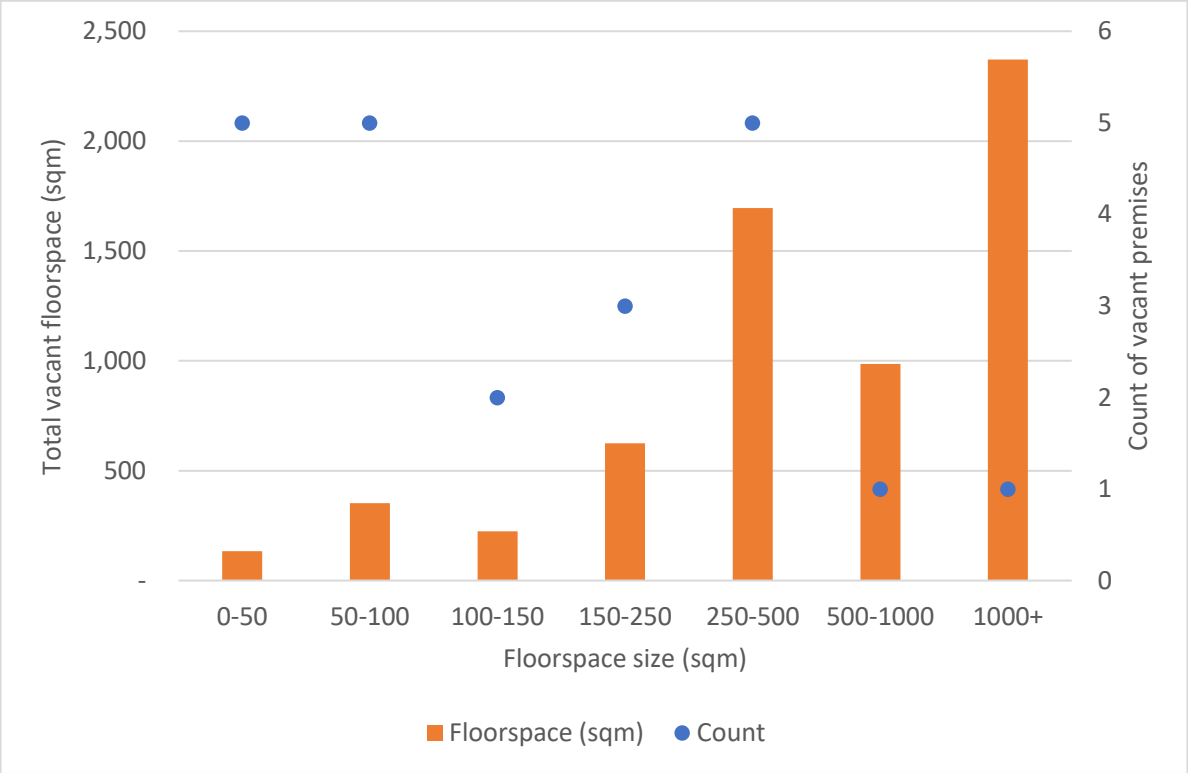
6.67 The advertised available space in Copeland equates to 8.99% of existing stock. This provides a snapshot of the vacancies at one point in time. However, a guideline healthy vacancy rate is considered to be around 7.5%, therefore, Copeland has a large supply of premises to meet

the demand.

6.68 However, it is important to note that this analysis has been undertaken whilst there is still COVID restrictions and therefore, it has been suggested that many businesses have put decisions regarding relocation / expansion on hold during this period and decisions on taking on new premises have been deferred. Furthermore, it is likely that there is increased vacancies due to the increase in working from home during covid-19 restrictions. This suggests that marketing activity may have been lower than usual during this period.

6.69 The figure below shows the industrial vacancies by size. This shows that there are large amounts of vacant premises 0-50sqm, 50-100sqm, and 250-500sqm.

Figure 19. Office Vacancies, April 2020



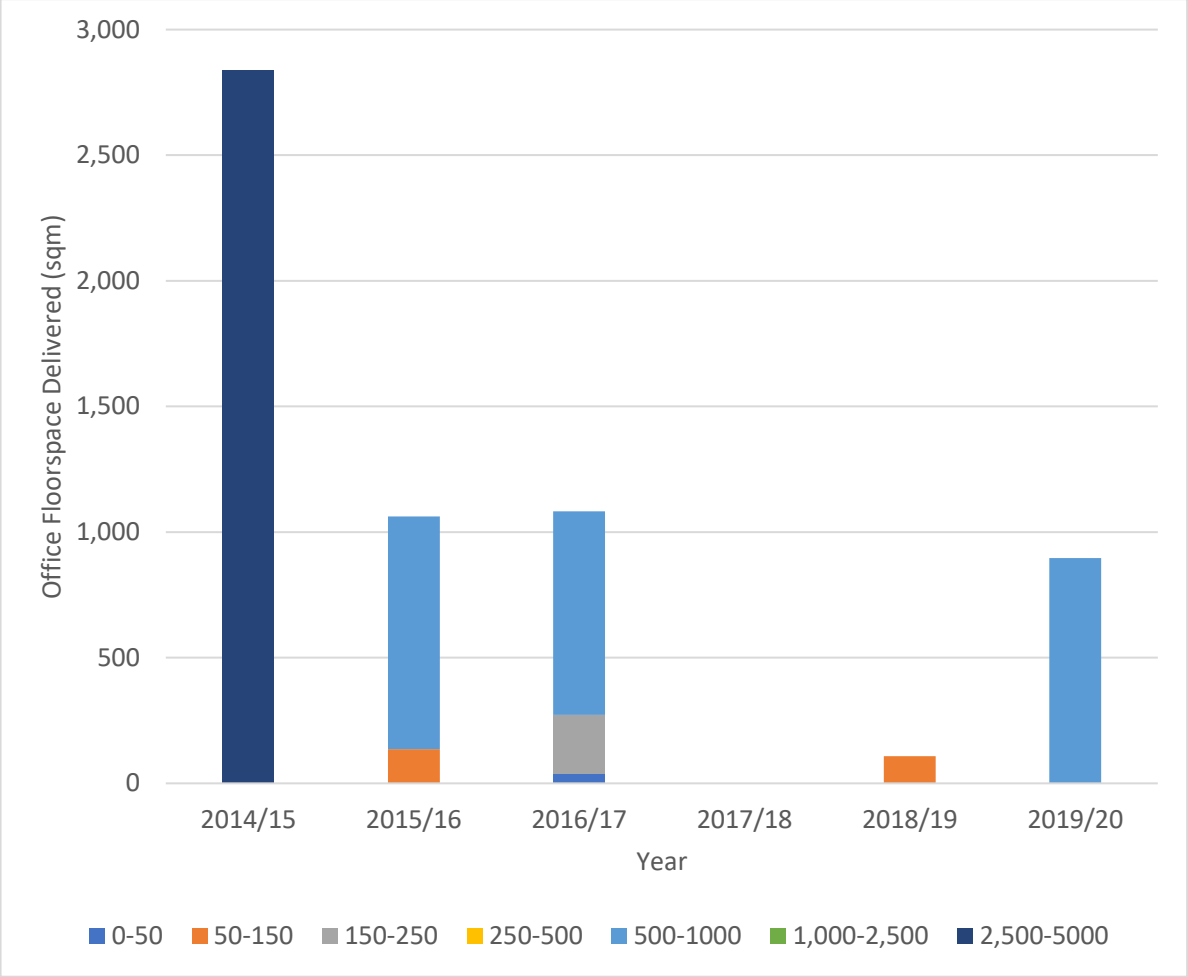
Source: SPRU Analysis of VOA Estates Gazettes and CoStar data

f) The Recent Pattern of Office Land Supply and Loss

6.70 Since 2014/15, there has been 5,989 sqm of office floorspace delivered in Copeland, equating to an average of 998 sqm per annum. This is based on data provided by the Council.

6.71 Figure 20 shows the gross completions per year. This shows that there have been few offices delivered in the past 6 years.

Figure 20. Office Floorspace Gains – by Year and Size Band (2014/15-2019/20)



Source: SPRU analysis of Local Authority Monitoring Data

6.72 The table below shows that the delivery of 5,989 sqm which is equivalent to a growth rate of 1.41%. This is above the 1% per annum that is generally held as a healthy growth rate.

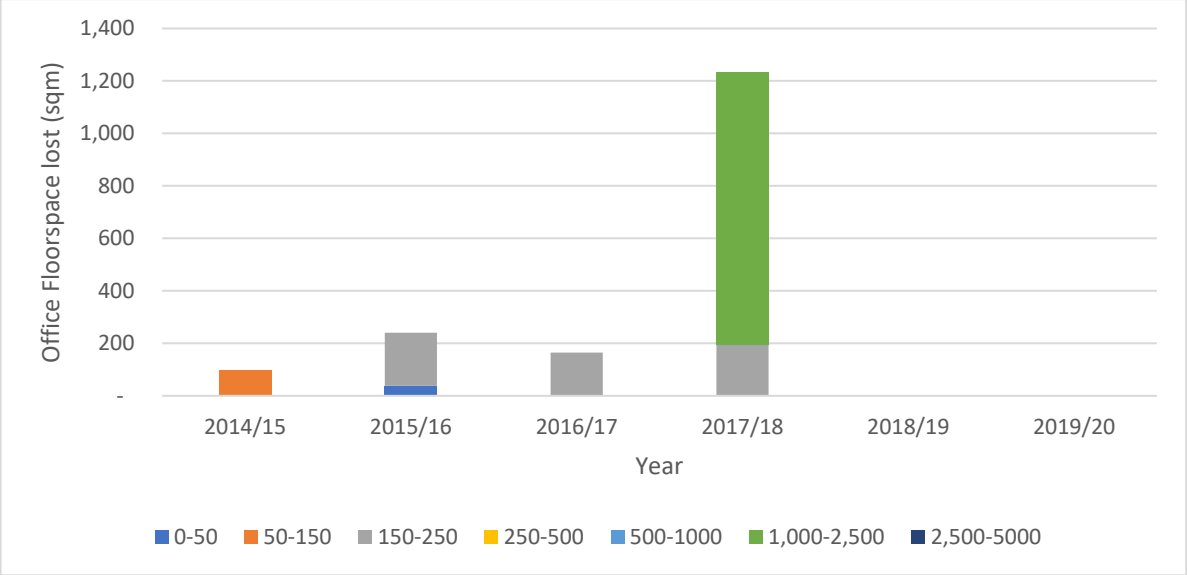
Table 21. Office completions vs office stock

Year	Industrial Floorspace (sqm)
Completions 2014/15 to 2019/20	**5,989**
Gross gains per annum	998
2019 Stock	71,000
Percentage growth per annum	1.41%

Source: SPRU analysis of Local Authority Monitoring Data

6.73 Since 2014/15, there has been 1,736 sqm of office floorspace lost in Copeland. This equates to an annual office floorspace loss of 289 sqm over this period.

Figure 21. Office Floorspace Losses – by Year and Size Band



Source: SPRU analysis of Local Authority Monitoring Data

6.74 Comparing the losses figures against the gross completions figures provides the net gain in office floorspace over the period since 2014/15, as shown in the table below. This shows that overall in Copeland, there has been a net gain of 4,252 sqm of office floorspace since 2014/15.

Table 22. Net gain of office floorspace (sqm) (2014/15 to 2020/21)

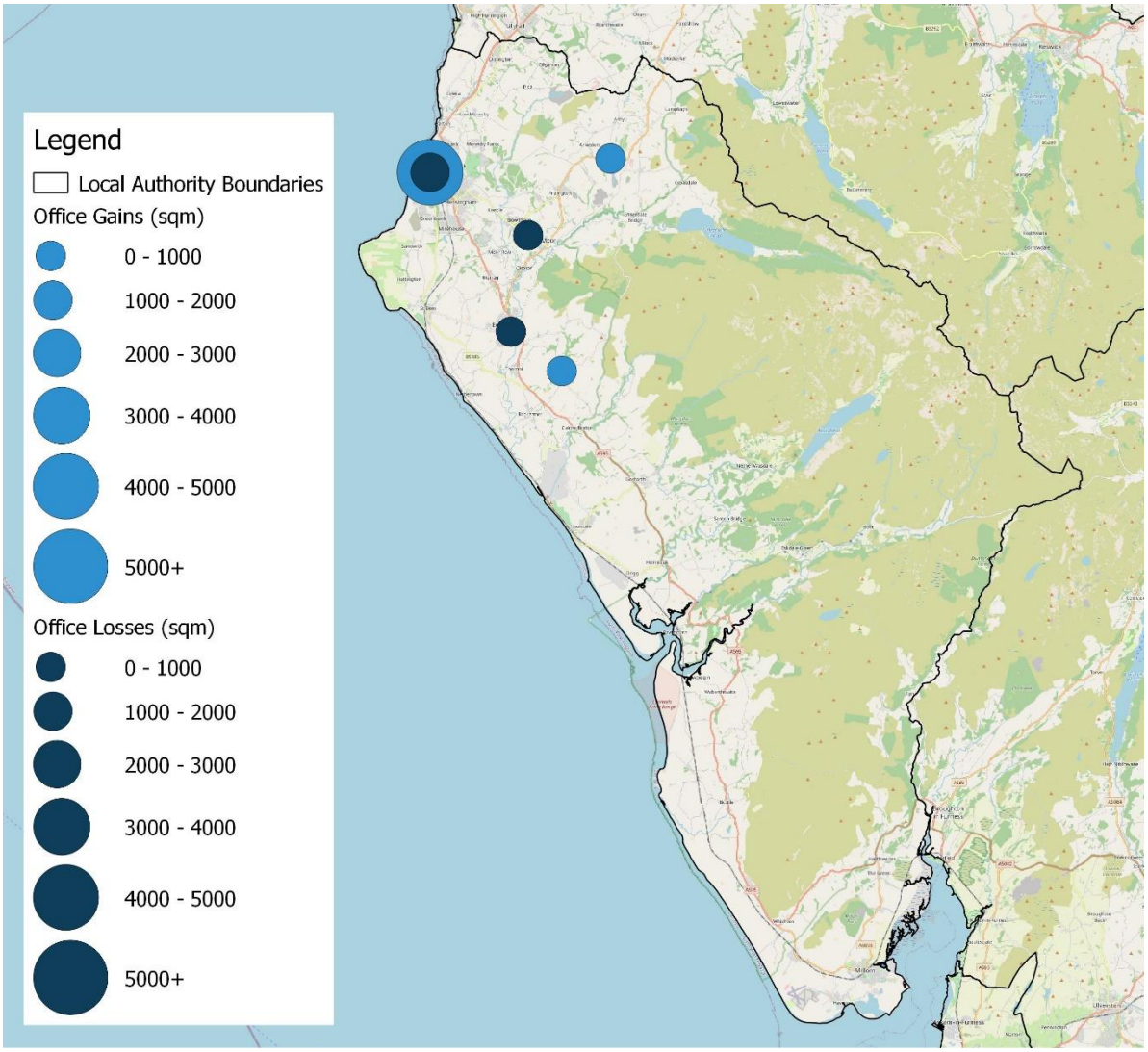
	Completions (sqm)	Losses (sqm)	Net gain (sqm)
2014/15	2,840	- 96	2,744
2015/16	1,063	- 241	822
2016/17	1,082	- 165	917
2017/18	0	- 1,235	- 1,235
2018/19	108	0	108
2019/20	896	0	896
Total	**5,989**	**- 1,736**	**4,252**

Source: SPRU analysis of Local Authority Monitoring Data

6.75 The data on office completions and losses set out in the table above is shown geographically in the map overleaf. This highlights that the most popular location for office development in Copeland is Whitehaven which has seen by far the largest quantum of office development since 2014. There has also been a smaller quantum of losses of office floorspace in Whitehaven over this period resulting in a net increase in the town and in the borough as a whole.

6.76 Other locations which have seen office development are Rowrah, Haile, and Egremont while there have been modest losses in Egremont and Cleator Moor. This again highlights the findings of the qualitative assessment that the office market is focussed in the northern part of the borough.

Figure 22. Office Gains and Losses by Location (2014/15 to 2020/21)



Source: SPRU analysis of CBC data

g) Employment Land Needs Based on Past Completions Trends

6.77 Taking the factors set out above into consideration, Table 23 sets out the employment land requirement figures based on past completions trends.

6.78 This shows that between 2021 and 2038 there is the requirement for 4.49 ha for office uses, 2.93 ha of B2 industrial, and 1.97 ha of B8 warehouse/distribution.

6.79 Here it is important to note that these forecast figures are derived very simply based on past rates. As such the viability issues constraining the delivery of industrial land being delivered in recent years may be reflected within the figures. Therefore, this need figure will be considered against the jobs forecasted in later sectors to provide a more comprehensive analysis.

6.80 The figures reflect market conditions for the period from which they are drawn. It should be noted that this period precedes the Covid pandemic. More recent commercial market analysis and qualitative feedback from the stakeholder engagement suggests that the pandemic and related lockdowns have resulted in increased demand for warehouse and distribution uses and increased levels of homeworking particularly for office-based sectors.

These trends will not be reflected within the past-trends forecast.

6.81 These issues are considered in more detail in other chapters of this report. Therefore the past-trends forecast should be considered alongside these wider analyses, and the other future economic growth and employment land forecasts set out in Section 10.

Table 23. Employment Land Needs Based on Past Completion Trends, 2021/2038.

Row Labels	Sum of Office B1 created (sqm)	Sum of Industrial B2 created (sqm)	Sum of Warehouse B8 created (sqm)	Sum of Total change (sqm)
2014/15	2,840	1,800	1,750	6,390
2015/16	1,063	2,100	249	3,412
2016/17	1,082	0	238	1,320
2017/18	-	0	390	390
2018/19	108	0		108
2019/20	896	0	0	896
Grand Total	**5,989**	**3,900**	**2,627**	**12,515**
Annual increase (2014/15 to 2019/20)	**998**	**650**	**438**	**2,086**
Forecast 2021-2038	**17,966**	**11,700**	**7,880**	**37,545**
Land Area	**4.49**	**2.93**	**1.97**	**9.39**

h) Summary

6.82 This section has provided a qualitative and quantitative assessment of Copeland commercial property market. The first part provides a qualitative assessment based on stakeholder engagement. The second part provides a quantitative assessment based on a range of data sources and monitoring data. The final part of this section looks at the future employment land requirement for each authority based on a past completions trend and interprets this in the context of the commercial market signals.

6.83 With regard to industrial floorspace in Copeland, there is a vacancy rate of 0.72%, this is very low considering a healthy rate is generally 7.5%. However, as this assessment was undertaken during the covid-19 pandemic whereby there was restrictions in place, many decisions on moving business premises have been put on hold and thereby reducing the vacancy rate. There was also a low rate of industrial floorspace growth per annum at 0.59% which falls below the 1% generally considered healthy. However, as was found in the qualitative assessment this is likely as a result of viability issues constraining the delivery of industrial floorspace. Taking the losses and completions into consideration, there has been a net loss of industrial floorspace of 3,623 sqm.

6.84 Office floorspace in Copeland has a healthy vacancy rate of 8.99%, above the generally considered healthy rate of 7.5%. There has also been a growth in office floorspace in the borough of 1.41% which is above the 1% healthy benchmark. Consequently, taking the losses and completions into account, there has been a net increase of office floorspace of

4,252sqm.

6.85 An estimate of the future requirements in Copeland for the plan period has been developed based on the trend of past completions. This identifies a need for 9.39 ha of employment land for the period 2021-38: around 4.49ha for office uses, 2.93ha of B2 industrial, and 1.97ha of B8 warehouse/distribution. However, it should be noted that this is based purely on past completions trends for the pre-Covid period and does not account for changes in the market following Covid-19. This is one way to estimate future employment land needs and should be considered against the other approaches as set out in section 10.

7.0 FUTURE ECONOMIC GROWTH

7.1 This section provides an assessment of the future economic growth forecasts for Copeland to 2038. The forecasts are assessed on an overall and sectoral basis to consider their suitability and robustness for planning purposes.

a) Economic Growth Forecasts

7.2 This section sets out the future employment growth identified by the econometric forecasts. Three econometric forecasts have been assessed:

- Cambridge Economics (CE)
- Oxford Economics (OE)
- Experian

7.3 These forecasts were produced in early 2021. All forecasts take account of the final terms of the Brexit deal agreed between the UK and EU in December 2020, and all three lockdown periods relating to Covid.

7.4 The forecasts provide different conclusions on future jobs growth in Copeland due to their different modelling methodologies and assumptions. These are briefly described below.

i) *Cambridge Econometrics (CE)*

7.5 The approach taken by the CE forecast is perhaps the simplest of the forecasting houses, insofar as it assumes that economic growth in the local area is not constrained by supply-side factors – such as population and the supply of labour. Therefore, the CE forecast makes no estimates of population, activity rates and unemployment rates of the local population. The forecast only provides outputs for total employment, which is equivalent to workforce jobs.

7.6 The CE forecast simply assumes that there will be enough labour (either locally, or through commuting and future in-migration) with the right skills to fill the jobs. The forecast provides no outputs on demographic or local population labour supply. If, in reality, the labour supply is not there to meet projected growth in employment, growth could be constrained.

7.7 The CE forecast is based on historic growth trends assessed in terms of the local area's performance relative to the region or UK trend – whichever has the strongest relationship with the local area. This process is undertaken on a sector by sector basis.

7.8 The forecast assumes that those relationships continue into the future. Thus, if an industry in the local area outperformed the industry in the region (or UK) in the past, then it will be assumed to continue to do so in the future. Similarly, if it underperformed the region (or UK) in the past then this will be projected forward in the future.

7.9 The CE forecasts run to 2036. SPRU have extended these to 2038 on a sectoral basis using the average annual projected growth rates for the years 2031-36 and applying this for 2 further years.

ii) *Oxford Economics (OE)*

7.10 The Oxford Economics forecasts sit within their global and national forecasts. This ensures macro-economic factors (such as developments in the Eurozone and UK Government fiscal policy) have an appropriate impact on the forecasts at a local authority level. This means the trends in OE's global, national and sectoral forecasts have an impact on the local area forecasts and means that the OE forecast is more than just an extrapolation of historical trends.

7.11 OE's local forecasting model depends essentially upon three factors:

- National/regional outlooks – consistency with the broader global and national forecasts;
- Historical trends in an area (which implicitly factor in supply side factors impinging on demand), augmented where appropriate by local knowledge and understanding of patterns of economic development; and
- Fundamental economic relationships which interlink the various elements of the outlook.

7.12 OE report in their data guide that the current macro-economic climate means that their local forecasts show most, if not all, local areas will face challenges in the short-term, irrespective of how they have performed over the past 15 years.

7.13 The OE forecasts are produced within an integrated modelling framework, which takes account of labour supply-side factors such as migration, commuting and activity rates and both models' employment and population growth.

7.14 The starting point in producing employment forecasts is the determination of workplace-based employees in employment in each of broad sector consistent with the regional and UK outlooks. At local authority level sectoral growth is driven by a range of factors:

- Some sectors are driven predominantly by population estimates,
- Others by total employment in the area,
- The remainder relative to the regional performance (largely exporting sectors),
- All sectors are also influenced by past trends in the local area.

7.15 Total employment is calculated by adding the employees in employment, the self-employed and Her Majesty's Forces. Self-employment data by region is taken from Workforce jobs data which is then broken down into detailed sectors using both employee trends and the UK. Data for the local authorities is Census based (and scaled to the regional self-employed jobs estimates) and is broken down using the employees in employment sectoral structure. The sectors are forecast using the growth in the sectoral employees in employment data and the estimates are scaled to the regional estimate of self-employment by sector.

7.16 The OE framework models population as an output which is economically driven and thus forecasts differ from the official population projections. The OE model uses official births and deaths projections from the 2016-based population projections; however, they use different migration assumptions based on their modelled UK migration, and at the local level, migration is linked to the forecast employment rate.

iii) *Experian*

7.17 Like OE, the Experian forecast is an integrated model providing a wide range of outputs on employment, workforce, and population trends. The Experian local model is based on the resolution of demand and supply for labour. This process takes into account commuting between local areas within a region and across the regional boundary as well as an estimate of the growth in the economic participation rates in a local area.

7.18 For population, the Experian model takes as an input data from the 2014-based Sub-National Population Projections. This shows considerable variation at the regional level. This, along with the economic participation rates, combine to produce substantial variation in the labour force forecasts for different regions.

7.19 Commuting flows are used to derive the available labour force for a region. In the case of the South East, these flows lead to a substantial difference between the resident employment and the workplace based employment.

7.20 In parallel, labour demand (in terms of workforce jobs) is estimated. This is done by industry sector by linking job growth in a local area to growth in the same industry at the regional level

and then constraining demand for jobs by industry to demand for jobs for the same industry at the regional level.

7.21 The Experian forecast constructs workforce jobs series for each local area using BRES/ABI data to disaggregate estimates for each industry sector. This is determined by the BRES share for a particular industry in a local area relative to the share in its parent region, which is then used to disaggregate the regional workforce jobs series for that industry to a local level.

7.22 The effect of this is:

- Demand for jobs at the local level is greatest / grows faster in those industries which are performing best at the regional level.
- Total demand for jobs at the local level depends on its industrial structure. Those local areas which have a more than proportionate share of the best performing industries will perform best overall.

7.23 The supply and demand for labour is then resolved by considering:

- The historic ratio between resident employment and workplace based employment in that local area
- The inflow and outflow of workers across regional boundaries
- Historic commuting patterns.

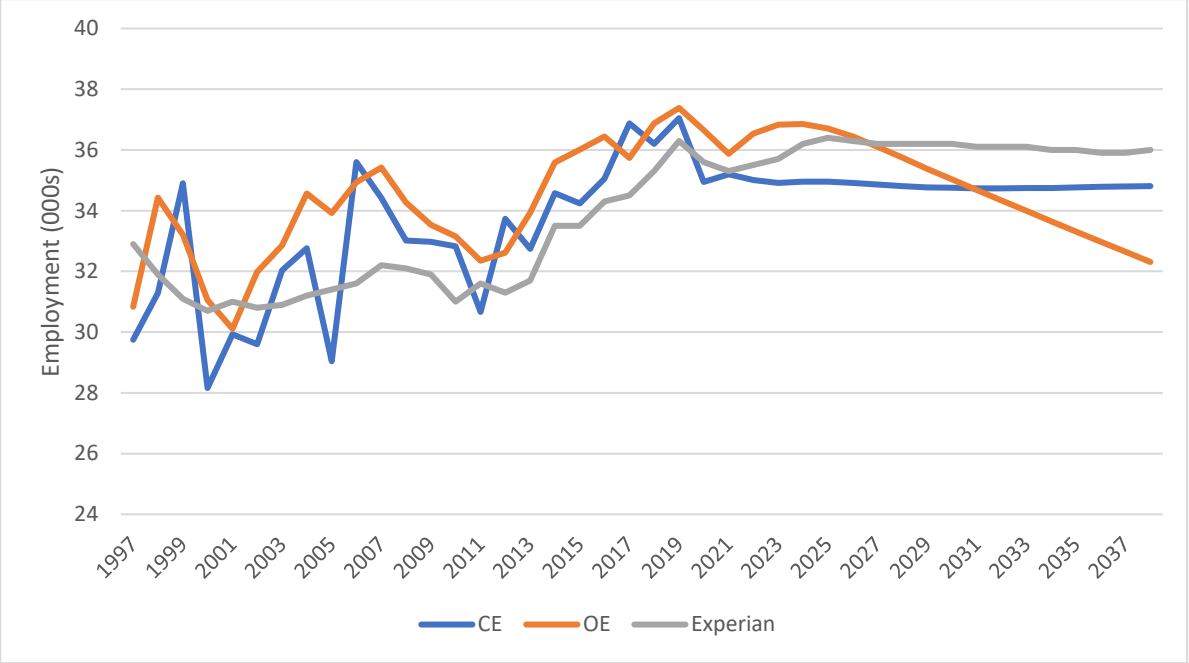
7.24 This is then converted back into jobs and used to produce final workforce jobs estimates for each local area.

b) Comparison of Forecasts for Copeland

7.25 Due to the differing methodologies and input assumptions, there are considerable differences between the forecasting outputs for Copeland. These are set out below. At the outset, a number of observations can be made:

- The forecasts show considerable variance for the historical data even though, obviously, there were a fixed number of jobs in Copeland at any given point in the past. This variance is due to how the historic 'backcasts' are formed which differs slightly for each forecaster in terms of methodology and data sources used.
- There is also considerable volatility in the historic data, particularly for the CE data. This is likely due to two factors. Firstly, is the relatively small size of the area – i.e. a district rather than a region for example. Secondly, any historic data based on survey data is likely to be more volatile in areas that are heavily reliant on data from a single employer – such as Copeland.
- Therefore, the historic data – as set out in Figure 23 – should be treated as providing a general indicator of employment trends in Copeland.
- It is notable that over the past 10 years or so the three forecasts begin to show a much closer alignment.

Figure 23. Total Employment Jobs, 1997-2038



Source: Analysis of CE, OE, and Experian

7.26 The headline jobs growth figures for each of the three forecasts for the Plan period 2021-38 is set out in the table below. This shows that the forecasts from Experian is the most positive at a headline level showing a growth of 700 jobs over this period, equivalent to 0.1% growth per annum. The CE forecast shows a modest loss of 400 jobs, equivalent to -0.1% growth per annum. While the OE forecast is considerably more negative showing a loss of 3,600 jobs over this period, equivalent to -0.6% per annum. The differences between these forecasts is set out in more detail below.

Table 24. Forecast Employment Growth, Copeland 2021-38

	Jobs Growth	Annual Growth Rate
CE	-400	-0.1%
OE	-3,600	-0.6%
Experian	+700	+0.1%

7.27 Figure 23 identifies a number of economic high and low points which usefully indicate 'market cycles' – i.e. periods of economic growth and contraction. The most recent cycle appears to be from 2011-21. This is the period from the previous economic low point or 'trough' – in terms of total employment – which in Copeland was in 2011 following the 'credit crunch' and national recession which followed this. This broadly accords with the national timeframe (the national low point was in 2010) but it unsurprising that this might have had a slower impact on Copeland due to the large number of jobs at, and related to, Sellafield insulating the local economy somewhat.

7.28 While it is difficult to predict a low point at the present point in time, all indications suggest that 2021 will be another 'trough'. As of early 2021, following a year of covid related lockdown restrictions, employment rates have dropped from previous levels. However, an economic 'bounce back' is anticipated once restrictions are lifted which is scheduled by mid-2021, and this is expected to see employment levels increase (at least in the short term). Therefore

2021 is expected to be another 'trough'.

7.29 The total level of employment in Copeland, as shown in the three forecasts in Figure 23, can be usefully compared over two periods:

- 2011-21: representing the most recent 'trough to trough'; and
- 2021-38: the future growth over the Plan period

7.30 All three forecasts show growth of between 3,500-4,500 jobs over the 2011-21 period, equivalent to an annual average annual growth rate of 1.0-1.4% per annum. However, looking forward, all three forecasts are considerably more negative, only the Experian forecast forecasts positive growth, and even then at a much lower rate of 0.1% per annum.

Table 25. Change in Total Employment in Copeland, 2011-21 and 2021-38

	2011-21		2021-38	
	Jobs Growth	**Annual Growth Rate**	**Jobs Growth**	**Annual Growth Rate**
CE	+4,500	1.4%	-400	-0.1%
OE	+3,500	1.0%	-3,600	-0.6%
Experian	+3,700	1.1%	+700	+0.1%

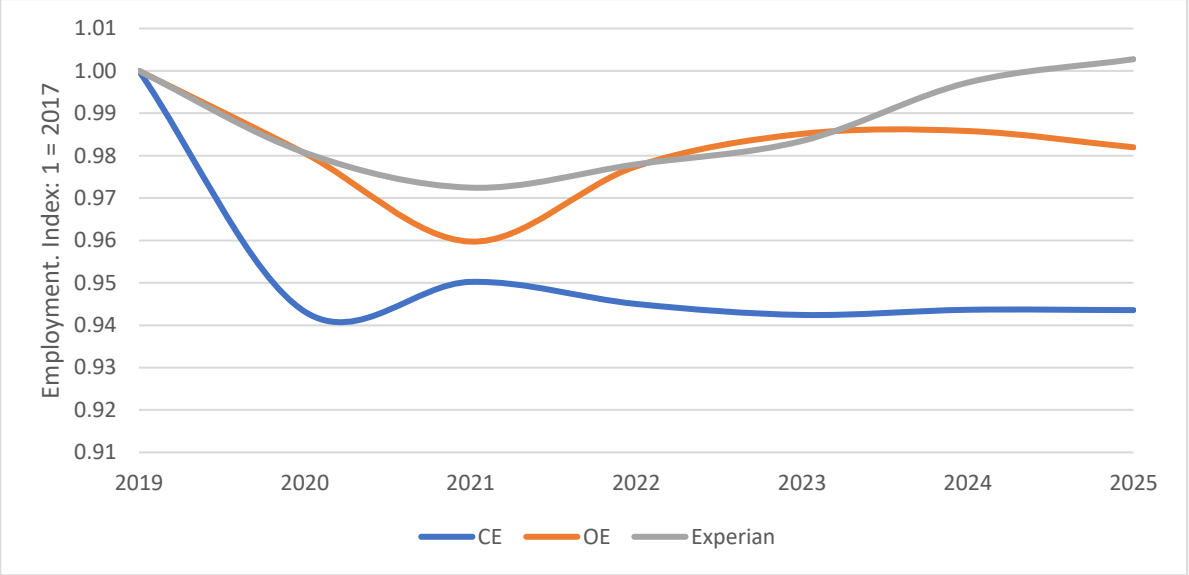
Source: Analysis of CE, OE, and Experian

7.31 In the short-term the main difference between the forecasts is primarily determined by the short-term impacts associated with the Covid pandemic and lockdown restrictions. This has impacts both in terms of the scale of job losses seen in 2020 and 2021, but also in the scale and rate of economic recovery.

7.32 The short-term forecast (for 2019-25) can be seen in Figure 24. The CE forecast shows a sharper and deeper decline in employment compared to OE and Experian. The levels of losses since 2019 shown in the OE and Experian forecasts accord more strongly with the wider economic indicators relating to Covid – as set out in Section 9, the commercial market signals – set out in Section 6, and the stakeholder consultation – also set out in Section 6. The wider indicators suggest that many of job losses due to Covid are likely to be short-term in nature supported by Government support schemes which is reflected in a post-Covid 'bounce' of varying degrees shown in the three forecasts.

7.33 Looking forward, the CE forecast forecasts a relatively small bounce in the latter half of 2021 as restrictions are lifted and consumer spending and confidence returns, however in the CE forecast this is relatively modest before levelling off, which remains for the rest of the Plan period. The OE and Experian forecasts show a much stronger bounce with employment levels in Copeland returning to 98% of pre-Covid levels by 2022 in both forecasts. The Experian forecast then shows continued growth exceeding pre-Covid levels by 2025, while the OE forecast begins tailing off by 2025.

Figure 24. Total Employment Jobs, Short-Term Impact 2019-2025



Source: Analysis of CE, OE, and Experian

7.34 The table below shows the forecast growth for each forecast for each five-year period from 2021-38. Taking account of the analysis above, this highlights the following trends:

- The OE and Experian forecasts show a stronger post-Covid bounce and short-term growth rate to 2025, while the CE forecast shows slight negative growth.
- For the remaining period from 2025 to 2038 the CE and Experian forecasts show very similar levels of modest negative growth, while the OE forecast shows a much stronger decline.
- Growth for all forecasts and all periods is lower than that seen in Copeland over the last 'trough to trough' period 2011-21 (1.0-1.4% per annum).

Table 26. Forecast Growth 2021-38 by Four / Five-Year Periods

	2021-25		2025-30		2030-35		2035-38	
	Jobs Growth	Growth Rate	Jobs Growth	Growth Rate	Jobs Growth	Growth Rate	Jobs Growth	Growth Rate
CE	-200	-0.2%	-200	-0.1%	0	0.0%	0	0.0%
OE	800	0.6%	-1,700	-0.9%	-1,700	-1.0%	-1,000	-1.0%
Experian	1,100	0.8%	-200	-0.1%	-200	-0.1%	0	0.0%

c) Sector Analysis

7.35 Table 27 sets out the change in employment jobs in each broad sector shown in each forecast. Most notably, all three forecasts show the manufacturing sector as having the largest losses over the period 2021-38. All three forecasts expect the manufacturing sector losing the largest quantum of jobs over this period, ranging from a loss of 1,500 (Experian) to 2,900 (OE).

7.36 For the CE and Experian forecasts, the manufacturing sector is the only sector to show significant losses (i.e. more than 100 jobs). These forecasts show growth in a range of other sectors, most notably the professional and business support, government services, and accommodation and food services sectors. Conversely, the OE forecast only shows growth

in the professional and business support sector and shows losses in a range of other sectors.

Table 27. Jobs Growth by Broad Sector, 2021-38

	CE	OE	Experian
Agriculture etc	0	-100	0
Mining & quarrying	0	0	0
Manufacturing	-2,400	-2,900	-1,500
Electricity, gas & water	0	0	-100
Construction	0	0	100
Wholesale & Retail	100	-300	100
Transport & storage	0	-100	100
Accommodation & food services	600	0	400
Information & communications	100	0	0
Professional & Business Support	600	400	400
Government services	600	-500	1,100
Other	-100	0	100
Total	**-400**	**-3,600**	**700**

7.37 The manufacturing sector is a very important sector for Copeland's economy, and it is be noted that all operations at Sellafield fall within the is sector. Therefore, assessment of this sector will be crucial for this assessment and will be considered in more detail in sub-section d below.

7.38 However, the figures for manufacturing have a very large impact on the overall job growth figures. When manufacturing is excluded from the figures, as set out in the table below, highlights the considerable alignment between the CE and Experian forecasts at headline level, and the divergence of the OE forecast for Copeland. This is also reflected in the sector growth set out in the table above.

Table 28. Job Growth Excluding Manufacturing Sector, 2021-38

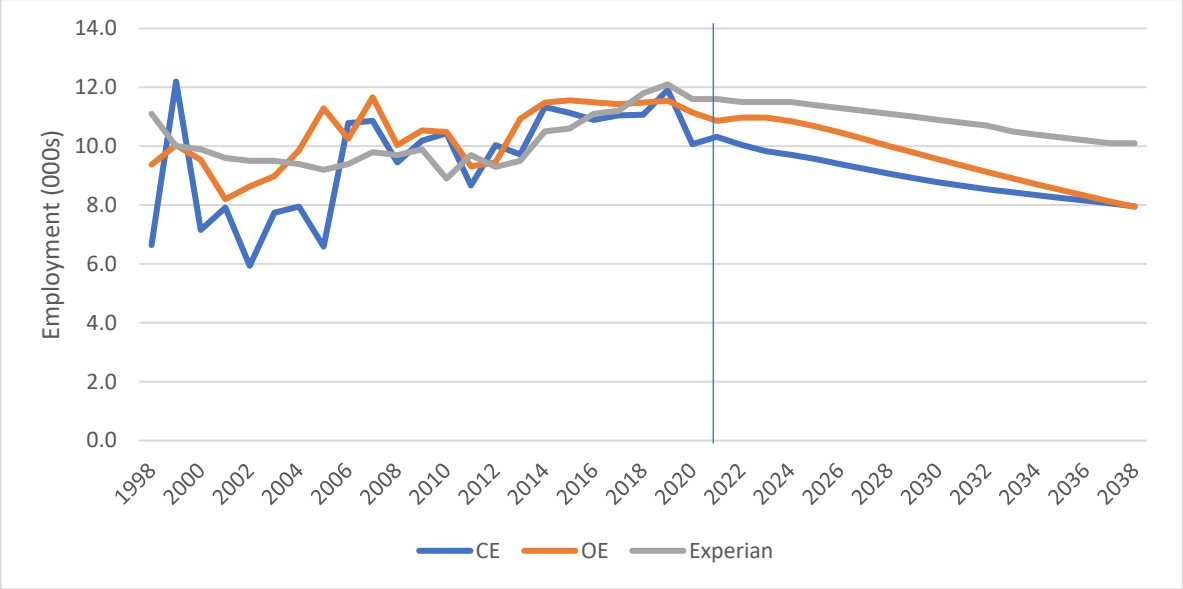
	CE	OE	Experian
Total Jobs Growth	-400	-3,600	700
Manufacturing	-2,400	-2,900	-1,500
Total Excluding Manufacturing	+2,000	-600	+2,200

d) Jobs in the Manufacturing Sector

7.39 Figure 25 shows the forecasts and the past trend since 1997. This shows relative consistency between the forecasts since the last trough in 2010 and there has been steady jobs growth in the sector in the ten years since until the outbreak of Covid in 2020. All the forecasts show this having a negative impact on the sector, but the CE forecast show the most significant impact with job losses of 1,900 between 2019-20 compared to 700 losses in the OE forecasts and 500 losses in the Experian forecast.

7.40 From 2021 onward – the base date of the forecasts – all forecasts show a declining trend in jobs in manufacturing sector resulting in significant losses by the end of the plan period.

Figure 25. Manufacturing Jobs, Copeland 1997-2038



7.41 Looking at the Experian forecast in greater detail, 100% of the 1,500 forecast job losses in the manufacturing sector are in the manufacture of basic metals sector. The CE and OE forecasts provide outputs at broad sector level and so do not explicitly provide outputs for each manufacturing sub-sector. However, the sector profile and therefore profile of growth for all forecasts is heavily informed by data from the Business Register and Employment Survey (BRES).

7.42 Table 29 shows Copeland's manufacturing jobs broken down by manufacturing sub-sectors. The data below is taken from the BRES data which is survey data and as such an average from 2015-19 has been used as data for individual years may miss small data. The Experian forecast and the previous CE forecast from July 2020 both provide a more detailed breakdown of the manufacturing sub-sectors which conform with the sub-sectoral breakdown shown in the BRES data below.

7.43 The BRES data shows that around 90% of manufacturing jobs in Copeland are in the manufacturing of basic metals sub-sector. This accounts for around 29% of all employment jobs in Copeland.

7.44 Further analysis of the BRES data at LSOA[2] level shows:

- 99.6% of jobs in the Manufacture of basic metals sector are at the Sellafield site – there are only 40 jobs in the sector elsewhere in Copeland.
- 100% of jobs in the Manufacture of basic metals sector at Sellafield are in the Processing of nuclear fuel sub-sector.

[2] Lower Super Output Area

Table 29. Manufacturing Sub-Sectors in Copeland

Sub-Sector	Employment	% of Manufacturing Employment	% of Total Employment
Food products	51	0%	0.1%
Beverages	12	0%	0%
Tobacco products	0	0%	0%
Textiles	0	0%	0%
Wearing apparel	0	0%	0%
Leather and related products	0	0%	0%
Wood and related products	18	0%	0.1%
Paper and paper products	80	1%	0.2%
Printing and recorded media	8	0%	0%
Coke and refined petroleum products	0	0%	0%
Chemicals and chemical products	2	0%	0%
Basic pharmaceutical Products	0	0%	0%
Rubber and plastic products	26	0%	0.1%
Other non-metallic mineral products	2	0%	0%
Basic metals	10,000	90%	29%
Fabricated metal products	600	5%	1.7%
Computer, electronic and optical products	70	1%	0.2%
Electrical equipment	0	0%	0%
Machinery and equipment n.e.c.	150	1%	0.4%
Motor vehicles, trailers and semi-trailers	8	0%	0%
Other transport equipment	0	0%	0%
Furniture	4	0%	0%
Other manufacturing	17	0%	0%
Repair and installation of machinery	100	1%	0.3%
Total	**11,148**	**100%**	**32.3%**

Source: BRES 2015-2019

7.45 It is clear that the prospects of the manufacturing sector for Copeland are inextricably linked to the operations at Sellafield. Where a sector is so strongly influenced by a single large operator, the usual forecasting methodologies can produce inappropriate results which appears to be the case here.

7.46 The forecasting approaches are set out in more detail at the beginning of this chapter, however in very broad terms, the approaches work by estimating the performance of a sector as a whole – i.e. all businesses within that sector – at regional and national levels, and then disaggregating this to local levels on a proportional basis based on the relative representation of that sector in the local area – i.e. the proportion of jobs in that sector nationally which are located within an area.

7.47 Generally this approach aggregates out over a large number of businesses and so an area with, for example, a large existing manufacturing base would be forecast to see a greater loss of manufacturing jobs, and therefore a larger loss of total jobs in its workforce. However, this would usually be disaggregated over a wide number of manufacturing businesses and sub-sectors.

7.48 However, this approach is effectively an aggregation of sectoral performance rather than an

expectation of how each business or niche sub-sector within the larger sector would be expected to perform. Therefore this approach is less effective where there is a single large operator, whose future employment operations may not conform to the forecast aggregation, yet whose employment in an area is large enough to significantly influence the forecast figures. Such is the case with Sellafield in Copeland.

7.49 All three forecasts show a future decline in manufacturing jobs in Copeland of varying degrees (a loss of 1,500 in Experian to a loss of 2,900 in OE). However, given the significant proportion of Copeland's manufacturing jobs which are at the Sellafield site, in order for the forecast scale of job losses to materialise, this would necessarily require job losses at Sellafield. In the Experian forecast this figure is 100% of all forecast manufacturing losses, while the BRES data suggests the figures in the CE and OE forecast will be between 90-100%.

7.50 However, preparation of this EDNA has involved consultation with a range of stakeholders, not least Sellafield themselves, who confirmed they have no plans for any job losses for the foreseeable future. Consultation with Sellafield has identified that the scale of job losses shown in the forecasts is not expected over the plan period. Sellafield anticipate the total amount of resource being used by Sellafield Ltd is expected to remain relatively static through to 2030 and have not indicated they expect this to change by 2038.

7.51 It is therefore considered that an amendment to the forecasts is appropriate for the manufacturing sector in Copeland in order to take account of this situation. An adjustment has been made to the forecasts so that the employment levels in the Manufacture of basic metals sub-sector over the period 2021-38 is held constant. This will mean there is zero change to employment in this sector over the Plan period.

7.52 This adjustment means the adjusted Experian forecast shows zero job losses in the manufacturing sector over the period 2021-38 instead of 1,500 job losses in the baseline Experian forecast. Applying the same adjustment to the CE forecast results in an adjusted CE forecast showing 900 manufacturing job losses in instead of 2,400 job losses in the baseline CE forecast.

Table 30. Manufacturing Adjustment – Manufacturing Jobs Growth 2021-38

	Baseline	Adjusted
Experian – Manufacturing jobs	-1,500	0
CE – Manufacturing jobs	-2,400	-900
OE – Manufacturing jobs	-2,900	-1,400

7.53 However, Sellafield is currently undergoing a process of rationalising its operational activity on site and moving existing on-site workers to alternative locations. This process of off-siting is not expected to create any additional jobs, but rather redistribute existing jobs currently located at the Sellafield site to other locations – some will be retained elsewhere in Copeland, some further afield, and some working from home. This will therefore create additional need for employment land within Copeland.

7.54 Sellafield off-siting has been accounted for separately as one of the elements of the Growth Scenario, set out in Section 8.

e) Conclusions on the Economic Forecasts

7.55 Three baseline economic forecasts for Copeland have been considered: from CE, OE, and Experian. At a headline level the forecasts provide a range of jobs growth outputs ranging from a growth of 700 jobs (0.1% growth per annum) in the Experian forecast, -400 jobs (-

0.1% per annum) in the CE forecast, and -3,600 jobs (-0.6% per annum) in the OE forecast. Growth for all forecasts and all periods is lower than that seen in Copeland over the last 'trough to trough' period 2011-21 (1.0-1.4% per annum).

7.56 The major difference between the Experian and the CE forecasts is largely due to the size of the post-Covid bounce expected in each forecast with Experian forecasting a pronounced bounce while CE shows a very dampened effect. Conversely, the OE forecast is considerably more negative, despite also showing a pronounced bounce, the forecast expects considerable long-term decline across a wide range of sectors.

7.57 In terms of sectoral growth, all forecasts are significantly affected by forecast losses in the manufacturing sector with Experian forecasting losses of 1,500 in the sector, CE forecasting -2,400 losses, and OE -2,900 losses. However, analysis of the underlying data shows that 90-100% of these losses are modelled to be at the Sellafield site and while these levels of forecast losses reflect the broader performance of that sector at a national and regional level, they do not reflect the future plans for Sellafield Ltd. Therefore an adjustment to the manufacturing sector has been made to account for this.

7.58 Considering the other sectors besides manufacturing in the forecasts, shows that the CE and Experian forecasts show similar levels of growth for Copeland to 2038 and both show growth in the professional and business support, government services, and accommodation and food services sectors.

7.59 However, the OE forecast is considered to provide a less suitable basis for positive planning in Copeland. This is evidenced in Tables 26 and 27 which show the OE forecast as considerably more negative across a wide range of sectors and stands in contrast to the CE and Experian forecasts. Applying an adjustment to the manufacturing sector in the OE forecast still results in an overall negative forecast, compared to the CE and Experian forecasts which show positive growth.

Table 31. Baseline Scenarios – Including Adjustments to Manufacturing, 2021-38

	Jobs Growth	Growth Rate
CE (manufacturing adjusted)	1,100	0.2%
Experian (manufacturing adjusted)	2,200	0.4%

7.60 The forecasts consider a 'business as usual' case, whilst taking account of macro-economic factors such as Brexit and Covid they do not however take account of transformative pipeline projects which will have a significant impact on future jobs growth in Copeland. These factors are considered in the Growth Scenarios set out in Section 8.

8.0 GROWTH SCENARIOS

8.1 Five growth scenarios have been developed which consider future policy interventions, initiatives, and pipeline projects which could see future economic growth in Copeland deviate away from the baseline forecasts. The scenarios considered are:

f) Sellafield Off-Siting – Sellafield is currently undergoing a process of rationalising its operational activity on site and relocating existing on-site workers to alternative locations. This will not impact on the number of workers, but will impact on the demand for employment land in the borough beyond the Sellafield site.

g) Increased capture of Sellafield's supply chain – a number of Council and LEP initiatives are aimed at increasing the level of jobs within Sellafield's supply chain which are retained within Copeland. This scenario considers the impact these might have on job growth and employment land needs.

h) Cumbria Clean Energy Park – considering the employment impacts of the development of an energy hub around the Moorside site. This primarily focusses on the direct and indirect jobs arising during the construction phase of a large scale nuclear power station for the purposes of this study, although it is recognised that other opportunities exist on the Clean Energy Park.

i) Woodhouse Colliery – considering the employment impacts of the development of a new coal mine. Considers the direct and indirect jobs during the construction and operational phases.

j) North Shore development – this development is tied into the growth of a number of initiatives focussed around the development of a big data campus and/or AI cluster which could see growth beyond that seen historically in Copeland.

8.2 The growth scenarios have been developed in order to assess the potential impacts and implications of these potential future developments on economic growth in Copeland and therefore allow the Council to reasonably plan for potential future employment land needs, depending on which (if any) of these scenarios were to proceed.

8.3 Selection and consideration of these projects within the growth scenario was based on the projects which were identified by stakeholders to the Council and to DLP Planning as the most important to Copeland's future economy.

8.4 However, it is recognised that some (or all) of the projects within the Growth Scenario may not come forward within the Plan period. As such, the outputs for each element of the Growth Scenario are provided separately so that the Council is most able to plan and adapt to changes as they arise.

a) Sellafield Off-Site Requirements

8.5 Sellafield is currently undergoing a process of rationalising its operational activity on site and moving existing on-site workers to alternative locations where there is no operational need to be on the site. This is an ongoing process which is expected to continue during the Plan period.

8.6 The process of off-siting is not expected to create any additional jobs, but rather redistribute existing jobs currently located at the Sellafield site to other locations. Some will be retained elsewhere in Copeland, some further afield, and some working from home.

8.7 The total amount of resource being used by Sellafield Ltd is expected to remain relatively static through to 2030. Although the relative mix of Sellafield Ltd employees versus supply chain partners is expected to change, as Sellafield Ltd focuses more on delivering core work whilst engaging the supply chain to deliver non-core services.

8.8 Sellafield have indicated that a combination of relocated Sellafield personnel and supply chain partners are likely to require off-site white collar office accommodation for up to 2,000 workers. With peak requirements expected by 2025-2027.

8.9 However, Sellafield Ltd have not provided a full schedule or timetable of workers to be moved off-site or accommodation requirements needed to support this process. We understand Sellafield are currently undertaking internal assessments to investigate these issues further, but were not in a position to share findings at the date of writing.

8.10 This process has been made more complex by the working patterns related to Covid and how this might impact on remote working patterns and off-site accommodation requirements in future. Sellafield Ltd are currently working to understand the impact of the pandemic on their working operations, but again were not in a position to share findings at the date of writing.

8.11 Sellafield Ltd have provided broad indications of the type of accommodation which will likely be required to relocate nonessential personnel off the Sellafield site. It is likely that Sellafield Ltd will require some additional off-site office accommodation, in the near future, in West Cumbria, however, specific locations and sizes have not yet been confirmed.

8.12 The types of roles that are likely to move off site are office workers and non-nuclear support functions which do not need to be located on the site. This would likely include a range of office-based functions, research and development, light industrial, auxiliary medical facilities, and warehousing.

8.13 There is likely to be a mix of requirements that could include traditional office space, 'touch down hubs'/flexible spaces for hot-desking and meetings. In addition, it is expected that an off-site material logistics consolidation hub will be required. The hub would require covered and uncovered storage areas and be well connected to existing transport infrastructure.

8.14 The following approach has been taken to estimate the impact that relocating 2,000 workers from the Sellafield site will have in terms of employment land needs in Copeland. The first step is to identify the sectors that these jobs are likely to fall into. This is necessary as all of the jobs at the Sellafield site are simply recorded as all falling within the Manufacturing of basic metals sector (as they relate to the processing of nuclear fuel). However, in terms of identifying suitable land use requirements a more detailed sectoral profile is required. This has been done using the sectoral profile of Sellafield supply chain jobs set out in the 2017 OE Report[3].

8.15 The next step is to consider the proportion of these jobs which should be located in Copeland. Commuting flows data from the 2011 Census shows that 68% of workers at the Sellafield site[4] live within Copeland, with a further 23% living in Allerdale. Further to this, account has been taken of changing working from home patterns which show increasing levels of home working, particularly following the Covid lockdowns. Sellafield have not provided any indications that their approach to remote working will differ from industry norms and so normal working from home rates have been used. This applies different working from home rates for different sectors but shows overall rates increasing over the Plan period (see Section 9 for more details). The modelling assumptions are summarised below:

[3] The Economic Impact of Sellafield (Oxford Economics, June 2017), Figures 12 and 13.
[4] Output Area E00097335

Table 32. Sellafield Off-Siting Modelling Assumptions

Factor	Commentary
Number of workers relocated	2,000
Sectors	Majority office based Sectoral split in-line with 2017 OE Report
Local retention	Assumed worker retention rates in-line with existing commuting rates which show 68% of workers come from Copeland
Remote working	Blended approach: some office, some remote working, some flexi-working Assumed remote working rates in-line with the normal projection

8.16 This results in 1,364 workers being relocated off the Sellafield site and who will require alternative employment locations in Copeland. These figures do not include the home working assumptions, so the actual numbers of worker requiring additional employment floorspace will be lower.

8.17 To work out the additional employment land requirement needed to support the off-siting from Sellafield, the off-siting jobs numbers are fed into the employment land model (as set out in Section 10) and so the modelling assumptions regarding rates of remote working per sector, land use per sector, employment density per sector, and plot ratios per land type are consistent with the wider modelling and reflect Copeland's market dynamics.

8.18 In terms of overall jobs numbers in Copeland, the Sellafield off-siting will not create any additional jobs. Therefore, while 1,364 jobs are added in a range of sectors, these are also deducted from the current jobs at the Sellafield site (which are all counted in the Manufacture of basic metals sector) so net jobs growth at a borough level is zero.

Table 33. Sellafield Off-Siting, Change in Employment 2021-38

Sector	Local Employment
Professional, Scientific and Technical	817
Public Administration and Defence	143
IT and Communications	103
Manufacturing	143
Business Support Services	158
Total	**1,364**
Manufacture of basic metals at Sellafield site	-1,364
Copeland Total	**0**

b) Increased local capture of Sellafield's supply chain

8.19 This section assesses the extent to which jobs within the Sellafield supply chain have been captured locally within Copeland and the potential for further capture and retention of supply chain jobs in the borough in future.

8.20 As set out in the previous section, the econometric forecasts estimate local jobs growth in each sector by linking job growth in a local area to growth in the same industry at the regional

level and then constraining demand for jobs in a sector at a local level to demand for jobs for the same sector at the regional level. However, this top-down approach has the potential to constrain local forecast growth in a borough based on the forecast growth in that sector at a regional scale. This could potentially override local growth drivers in a local economy and does not take account of local drivers such as the economic opportunities arising from the Sellafield supply chain.

8.21 The Economic Impact of Sellafield report (Oxford Economics (OE), June 2017) sets out Sellafield's economic impact, in terms of productivity (GVA) and employment, to Copeland's economy. It considers direct jobs at the Sellafield site as well as indirect jobs supported in the supply chain, and induced jobs supported by worker spending within the local economy. OE estimate that Sellafield supports 21,090 jobs within Copeland, including 10,976 direct jobs at the Sellafield site, implying that there are 5,299 indirect jobs within the local supply chain, and 4,815 induced jobs resulting from employee expenditure in the local area.

8.22 OE's analysis shows that Sellafield is responsible for 58.7% of all employment in Copeland. The direct jobs at the Sellafield site account for 30.5% of Copeland's total jobs, while indirect jobs within the local supply chain accounts for 14.7% of Copeland's total jobs, and induced jobs due to wage expenditure accounts for 13.4% of Copeland's total jobs.

Table 34. Sellafield Ltd's Employment Contribution in Copeland, 2016/17

Sellafield Related Jobs	Jobs	% of Copeland Total Jobs
Direct Jobs	10,976	30.5%
Indirect Jobs in Copeland	5,299	14.7%
Induced Jobs in Copeland	4,815	13.4%
Total Jobs in Copeland	**21,090**	**58.7%**

Source: Derived from data in Oxford Economics 2017

8.23 The OE report provides details of Sellafield's supply chain spend broken down by sector. This is broken down into Tier 2 spending – Companies receiving this first round of supply chain spending directly from Sellafield Ltd; and Tier 3 spending – the second round of supply chain spending by Tier 2 companies. The top 10 Tier 2 and Tier 3 sectors are set out in the tables overleaf. Cumulatively, these sectors comprise 84.6% of all Tier 2 spending, and 72.6% of all Tier 3 spending.

Table 35. Top 10 sectors for tier 2 spending in the UK in 2016/17

	Total Spend (£m)	Share of Total
71 Architectural and engineering activities	463.8	37.8%
43 Specialised construction activities	196.2	16.0%
84 Public administration and defence	81.1	6.6%
62 Computer programming and consultancy	58.3	4.8%
26 Manufacture of computer & electronic products	56.3	4.6%
78 Employment activities	48.7	4.0%
82 Office administrative and business support	41	3.3%
42 Civil engineering	35.2	2.9%
41 Construction of buildings	31.3	2.6%
28 Manufacture of machinery and equipment n.e.c.	24.9	2.0%
Total	**1,036.8**	**84.6%**

Source: Oxford Economics 2017

Table 36. Top 10 sectors for tier 3 spending in the UK in 2016/17

	Total Spend (£m)	Share of Total
43 Specialised construction activities	68	20.0%
25 Manufacture of fabricated metal products, except machinery and equipment	37.5	11.0%
71 Architectural and engineering activities	32	9.4%
28 Manufacture of machinery and equipment n.e.c.	23.7	7.0%
74 Other professional, scientific and technical	19.3	5.7%
70 Activities of head offices	16.6	4.9%
46 Wholesale trade, except motor vehicles	13.2	3.9%
62 Computer programming and consultancy	13.2	3.9%
61 Telecommunications	12.3	3.6%
78 Employment activities	10.9	3.2%
Total	**246.7**	**72.6%**

Source: Oxford Economics 2017

8.24 Clearly, the Tier 2 and Tier 3 sectors are the most important sectors to consider the impacts of the Sellafield supply chain in Copeland. The OE report has provided information on this and reports that Sellafield Ltd's economic footprint is especially concentrated in several of Copeland's sectors. Table 37 sets out the sectors which have the highest proportion of jobs in Copeland estimated to be within the Sellafield supply chain. This suggests there are a number of sectors in Copeland which are effectively wholly dependent on Sellafield Ltd.

Table 37. Copeland sectoral impacts (sectors employing 100 or above), 2016/17

	Sellafield Share of sectoral jobs in Copeland
Computer programming, consultancy	100.0%
Architectural and engineering	100.0%
Specialised construction activities	100.0%
Office administrative, office support	100.0%
Manufacture of basic metals	100.0%
Public administration and defence	100.0%
Other personal service activities	88.2%
Other professional, scientific	78.3%
Civil engineering	50.1%
Manufacture of machinery and equipment	42.4%
Total	**58.7%**

Source: Oxford Economics 2017

8.25 Using data from the Business Register and Employment Survey (BRES) the main supply chain sectors have been analysed to assess rates of employment growth over the ten-year period 2009-19. This is set out below for each of the supply chain sectors for Copeland and a range of wider geographical areas.

8.26 This shows a range of performance across difference sectors, but most notably the two largest supply chain sectors – 71 Architectural and engineering activities and 43 Specialised construction activities – have seen strong growth over this period in Copeland. The Architectural and engineering activities sector has seen an average annual growth rate of 4.8% per annum in Copeland which is however lower than the growth seen at Cumbria (7.2%) and regional (5.4%) but higher than the national average (3.1%). The Specialised construction activities sector has seen an average annual growth of 7.2% per annum which is considerably higher than any comparator areas.

8.27 However, as Copeland's economy is much smaller than these comparator areas the growth rates for individual sectors can be quite volatile as a very high or low growth rate simply reflects a low starting base (denominator) for some sectors. To avoid this, the key figure to consider is the sum of the main supply chain sectors which as of 2019 equated to 8,750 jobs[5] within Copeland's economy – 25% of total employment in Copeland. This figure does provide a robust basis for assessment and is, as set out above, significantly reliant upon Sellafield ltd for driving jobs growth.

8.28 The BRES data shows that the main supply chain sectors in Copeland have grown at an annual rate of 4.1% per annum since 2009. This is notably higher than any of the comparator areas which have seen growth ranging from 1.1-1.6% over this period. Similarly, this rate of growth vastly outstrips the overall growth rate for all sectors in Copeland which was 0.9% per annum over this period – lower than regional or national growth rates. This highlights the strong growth in the main supply chain sectors in Copeland over this period.

[5] It is important to note that this is all jobs in the main supply chain sectors, not all jobs within the supply chain.

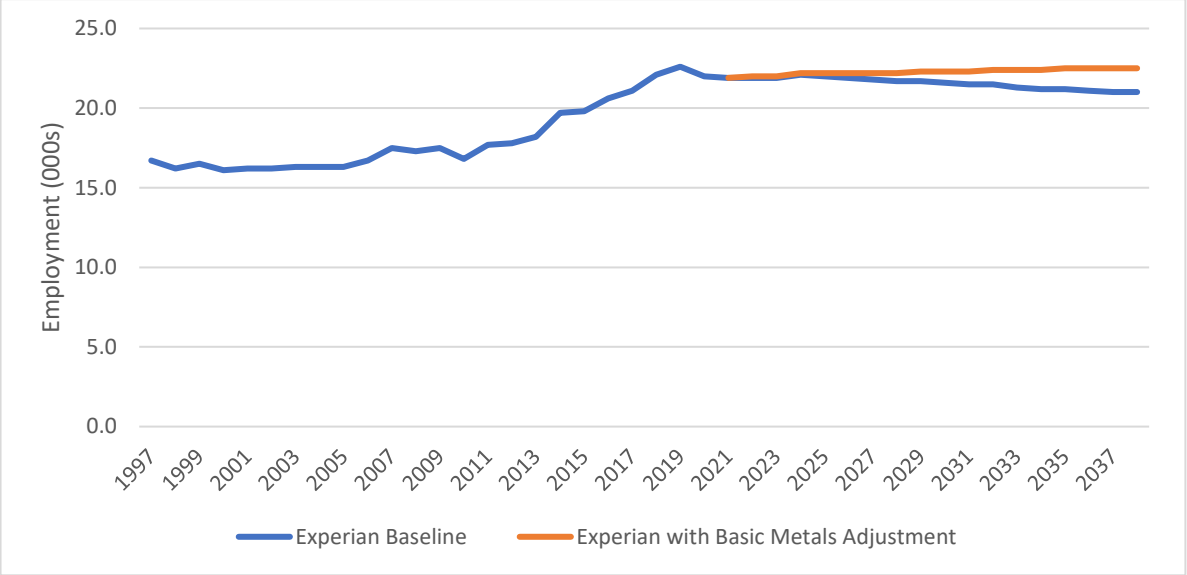
Table 38. Main Supply Chain Sectors Annual Growth Rates, 2009-19

SIC	Broad Sector	Copeland	Cumbria	England	North West
25	Manufacturing	2.3%	0.0%	-1.0%	-1.4%
26	Manufacturing	-9.3%	-1.2%	-0.8%	1.0%
28	Manufacturing	25.9%	-1.0%	0.1%	-2.5%
41	Construction	8.6%	-1.2%	1.9%	-2.4%
42	Construction	3.4%	-1.8%	-0.6%	3.4%
43	Construction	7.2%	0.0%	0.5%	-0.7%
46	Wholesale & Retail	1.3%	1.6%	0.6%	1.8%
61	ICT	0.0%	-1.8%	-0.5%	0.4%
62	ICT	-1.8%	2.3%	4.2%	1.4%
70	Prof, Sci & Tech	7.2%	4.5%	3.8%	5.8%
71	Prof, Sci & Tech	4.8%	7.2%	3.1%	5.4%
74	Prof, Sci & Tech	7.2%	7.6%	3.0%	8.2%
78	Business Support	-9.3%	-4.0%	2.2%	3.9%
82	Business Support	-2.5%	3.6%	6.2%	7.5%
84	Public Admin	7.2%	1.0%	-1.5%	-1.5%
Main Supply Chain Sectors		**4.1%**	**1.1%**	**1.4%**	**1.6%**
All Employment		**0.9%**	**0.7%**	**1.2%**	**1.2%**

Source: Analysis of BRES data

8.29 Figure 26 shows the levels of employment in Copeland in the main supply chain sectors. This shows the strong and steady growth in jobs over the recent past – representing the 4.1% annual growth rate between 2009-19. This contrasts with the future forecasts for the main supply chain sectors which are shown in the Experian baseline to decrease of 900 jobs by 2038 – an average rate of -0.2% per annum. The adjusted Experian forecast which takes account of the basic metal sector (as set out in Section 7) shows a modest growth of 600 jobs by 2038 – an average annual growth rate of 0.2% per annum.

Figure 26. Copeland Main Supply Chain Sectors Jobs – Baseline Forecast



Source: Analysis of Experian data

8.30 This analysis shows that the strong growth which has been seen in the main supply chain sectors in Copeland over the past ten years is not reflected in the future forecasts for Copeland. There are a number of potential reasons for this:

- The forecasting is based on longer-term trends
- The forecasting reflects wider micro-economic trends for these sectors which are expected to be negatively influenced by factors such as Brexit and Covid-19.
- The forecasts are affected by Copeland's relatively small employment base – i.e. its ratio of regional employment – rather than its past growth rates.

8.31 However, the stakeholder engagement and policy review has identified a number of factors which suggest that, contrary to the future growth (or decline) shown in the forecasts, Copeland is in a position to capture and retain a greater proportion of opportunities arising from the Sellafield supply chain going forward. Key themes from the stakeholder discussions were:

- Redevelopment of Leconfield Industrial Estate to develop a business hub and one stop shop for the nuclear and wider energy sector at Cleator Moor. The site has recently been purchased by the Council with the aim to create a true business cluster supporting cross pollination and entrepreneurship, shared skills and support services, focussed, at least initially on the industries within the Sellafield supply chain.
- The Cleator Moor Town Deal includes a number of bid funding initiatives to support development and growth of key employers and economic development initiatives in the town including and additional to the redevelopment of Leconfield Industrial Estate.
- LEP LIS. One of the Business Priorities identified within the LIS is to exploit and expand supply chain opportunities arising from Sellafield and the nuclear sector. The LEP is facilitating work between Sellafield and potential Tier 2 suppliers aimed at local SMEs around Cumbria. The LEP is also focussing on supporting the growth of the labour market, attracting inward investment, and improving network resilience, which will help support the opportunities for growth within the sector.
- Changes in procurement. The Programme and Project Partners (PPP) model was

launched in 2019. The new approach is set up to support faster, more effective project delivery, stability in design and construction supply chains, greater workforce flexibility, and local economic benefit. This new approach, with a greater focus on local economic benefits, provides potential for more job retention in Copeland.

- The nature of operations at the Sellafield site, and the nuclear sector in general, is more resilient than many other sectors. Operations at the site and in related employment has been less affected by short-term factors such as Covid-19 than other industries.
- Similarly, the nature of nuclear decommissioning means the supply chain opportunities are less influenced by European market forces than many other industries. As a result Brexit was considered less of a risk to future jobs growth in Copeland than for other areas.

8.32 As shown in the previous analysis, the jobs growth forecasts do not account for these factors. Therefore a growth scenario has been considered whereby the growth in the main supply chain sectors has been adjusted to reflect growth over the past ten years.

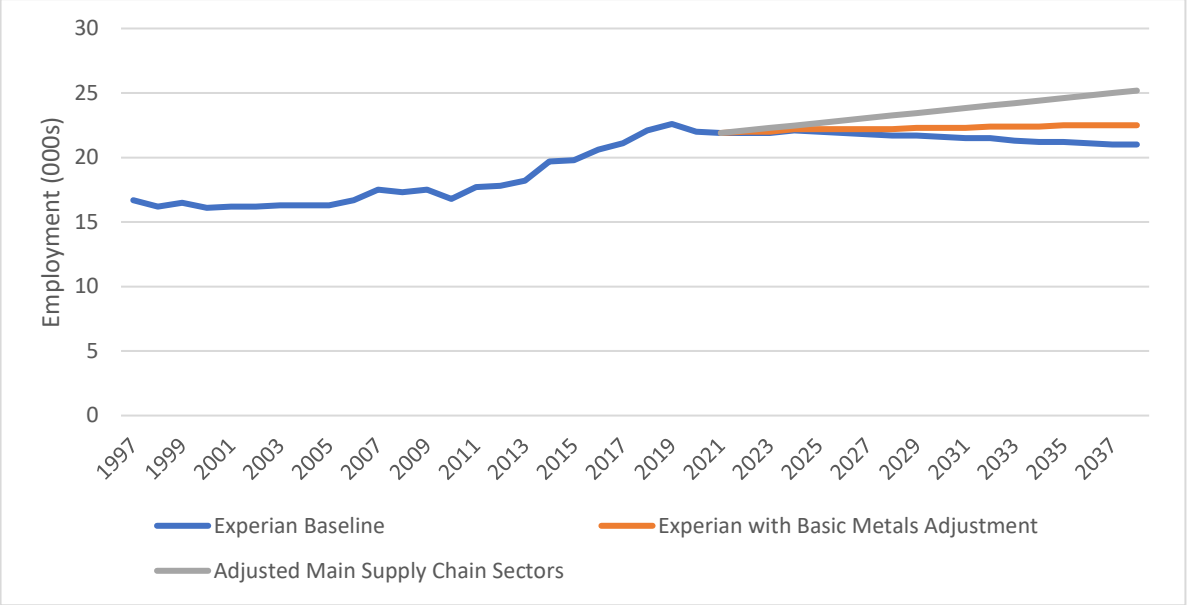
8.33 Growth in each of the main supply chain sectors has been adjusted to reflect the level of growth for that sector in Copeland over the period 2011-2021. As set out in section 7, this reflects the most recent 'trough to trough' period in Copeland and therefore can be considered reflective of a full market cycle.

8.34 For some sectors, for example Professional, scientific and technical services and Business support services, only parts of these sectors were identified as sub-sectors within the main supply chain. For these sectors, growth was apportioned on a proportional basis based on the number of main supply chain jobs within that sector.

8.35 Finally, the share of sectoral jobs in Copeland which can be apportioned to Sellafield (as set out in Table 37) is applied to each sector in order to account for the proportion of jobs in each sector in Copeland which are not within the supply chain and should therefore not be uplifted.

8.36 This results in an additional growth of 3,300 jobs across the main supply chain sectors in Copeland by 2038. This is equivalent to an average annual growth rate of 0.8% per annum across the main supply chain sectors. As shown in Figure 27 this rate of growth would be higher than the baseline or adjusted baseline forecasts, but the growth is lower than the high rate of growth seen in Copeland since 2011 but is also reflective of the longer-term forecast.

Figure 27. Copeland Main Supply Chain Sectors Jobs – Growth Forecast



c) Cumbria Clean Energy Park

8.37 The Cumbria Clean Energy Park will be the deployment site and testing ground for low carbon energy technologies, including nuclear new build, Small Modular Reactors and other Advanced Nuclear Technologies, as well as pioneering research and development in Robotics and AI, environmental remediation, advanced fuels and manufacturing.

8.38 The project is led by two consortiums looking to develop new projects in the area which could form part of the park:

8.39 EDF has proposed building a new nuclear power station comprising two EPR-type reactor units at Moorside which will be similar to the reactor design that is being constructed at Hinkley Point and Sizewell C.

8.40 In addition, the UK SMR Consortium[6] has proposed to develop a Small Modular Reactor (SMR) compact power station which would be the first of its type in the UK. UK government has invested £18m of Industrial Strategy Challenge Funding in the UK SMR consortium, to develop their compact clean power station towards commercial deployment. This could become a "springboard" for global export of a UK product, with benefits to energy and market security.

8.41 The site will also be the testing ground and deployment site for first of a kind or prototype of Advanced Modular Reactors (AMRs), which could reuse existing stocks of nuclear materials stored at Sellafield or produce hydrogen for export as a fuel or as a form of energy storage.

8.42 The development of the Cumbria Clean Energy Park would build on the exiting nuclear sector capability, supply chains, manufacturing capability and knowledge infrastructure within the Copeland and wider regional economy. The economic impact could be significant, with multiple manufacture/fabrication hubs and dispersed supply chains.

8.43 The future economic impacts of the Clean Energy Park has been estimated. Analysis has been informed by stakeholder engagement with EDF Energy, the Nuclear Decommissioning

[6] comprising Rolls-Royce, Jacobs, the National Nuclear Laboratory, Nuclear AMRC, BAM Nuttall, Assystem, Laing O'Rourke, Atkins/SNC-Lavalin and TWI

Authority, Copeland Borough Council economic development officers, and Cumbria LEP. UKSMR and the National Nuclear Laboratory (NNL) were sought for interview but did not take part.

8.44 The proposed new nuclear power station at Moorside will be similar in design to Sizewell C in Suffolk and Hinkley Point in Somerset. Potential economic impacts and timescales have been assumed in line with figures from the economic impact assessment of the Sizewell C development[7].

8.45 The development of a new power station will require development consent order which will take many years to be completed. Hinkley Point took 5-6 years while Sizewell C has taken 9-10 years and is currently still at examination stage. Taking an average of these timeframes, which allows for the fact that the process at Moorside is yet to commence, means a realistic lead-in time would be 7-8 years.

8.46 To estimate the employment impacts of the new Moorside power station, construction and operational job profiles have been taken from the Environmental Statement for Sizewell C[8] (EDF, May 2020). This provides the predicted average breakdown of home-based workers by year of construction period by role, as set out in the table below. The definition of 'home-based workers' is those within a 60-minute commute. Operational jobs are expected to ramp up over the period from 30 in year 5 to 900 in year 12.

Table 39. Predicted Average Breakdown of Home-Based Workers by Role

Year	Total	Civils	Associated Development Construction / Demolition	Mechanical and Electrical Heating	Professional and Management	Site Support
1	220	150			10	50
2	510	270	100		30	110
3	940	510	140		60	220
4	1,140	690	50		90	310
5	1,560	840		100	130	500
6	1,810	710		470	140	490
7	1,780	440		650	150	540
8	1,610	240		780	130	460
9	1,180	170		650	80	280
10	420	70	20	210	30	100
11	240	120	50		20	60
12	100	60			10	30

Source: EDF, 2020

8.47 The Sizewell C Socio-Economic Assessment[9] also provides an estimate of supply chain spending relating to the development of Hinkley Point and therefore what could be expected at Sizewell C and by extension Moorside.

[7] Sizewell C Project Economic Statement and Environmental Statements, EDF Energy, May 2020
[8] The Sizewell C Project Environmental Statement, Volume 2 Main Development Site, Chapter 9 Socio-economics, Appendices 9A - 9F
[9] Chapter 9.7

8.48 At Hinkley Point, EDF Energy and the Department for Business, Energy & Industrial Strategy (BEIS) estimate that committed local and regional spend stood at £1.55 billion at the end of 2018. £650 million had (at July 2018) been spent in the south-west (including South Wales). This committed regional spend equates to around 7% of total spend on the Hinkley Point C project, and is likely to grow further.

8.49 By comparison, information on local contract expenditure for the main civils contractor at the most recent comparative example of a new nuclear build elsewhere - Flamanville 3 in France - showed about 2% local expenditure out of €400 million total (2007–mid-2009), within 50km of that site, mainly in Cherbourg.

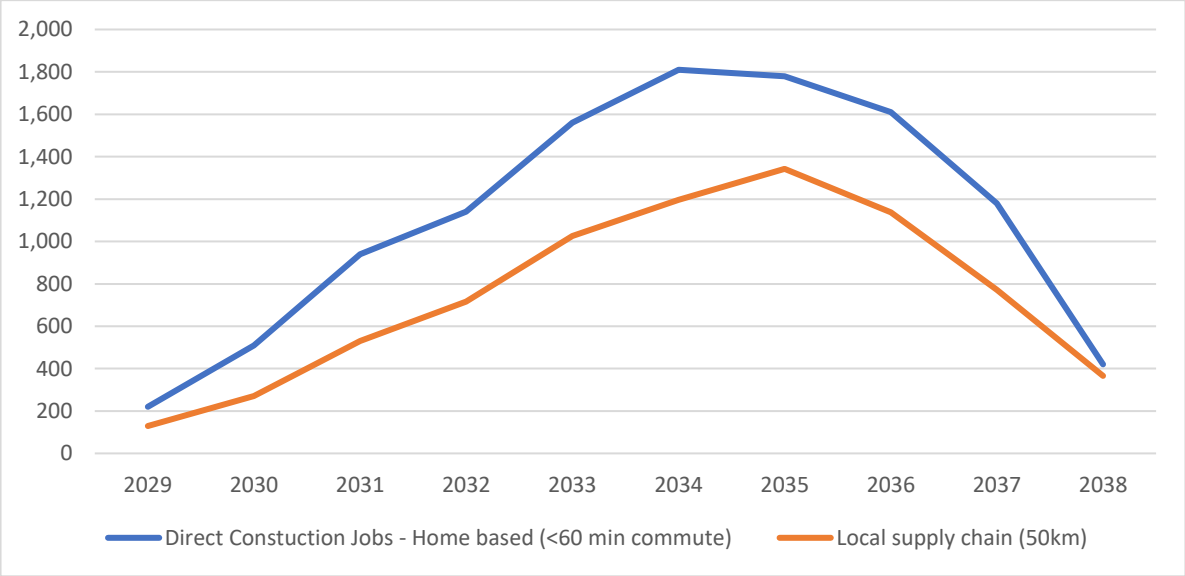
8.50 At Sizewell B, the figure of contracts with local firms in the larger area of Suffolk and Norfolk was a little higher at about 4% (i.e. c. £80 million out of total contract value of about £2 billion) over the construction phase (1987- 1995, not adjusted for inflation).

8.51 The total value of the Sizewell C project is estimated at £20 billion, made up from the sourcing of goods and materials, and cost of labour. It is anticipated that – if similar activities and local supply chain recruitment are achieved at Sizewell C as Hinkley Point C – there could be a 'local' retention of in excess of £1.5bn over the construction period, equivalent to an average of £125m per year.

8.52 Taking the above level of supply chain spending into account it is possible to estimate the expenditure within the local supply chain relating to the construction of Moorside and then derive the jobs this would support in the local economy using the ratio of productivity per worker.

8.53 This results in the following local jobs growth profile associated with the development of the proposed new power station at Moorside.

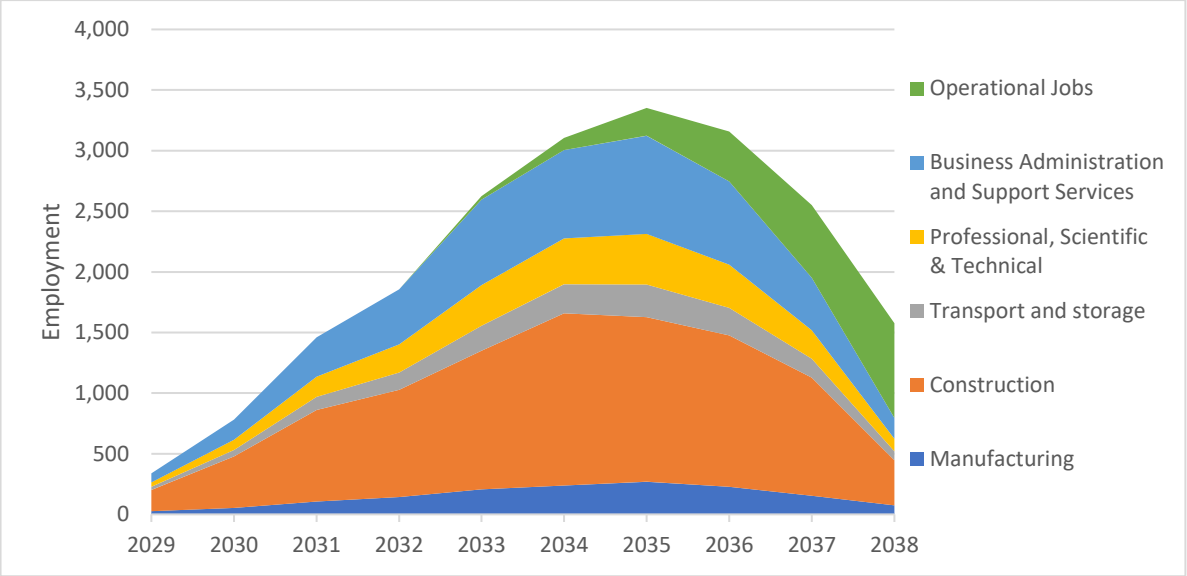
Figure 28. Moorside – Construction Phase Jobs



8.54 A wide range of local and regional firms may benefit from these contracting opportunities. The supply chain would seek to procure a large range of other (non-construction) services including, for example, professional and design services, facilities management (for campuses and park and rides), transport services, security and catering. Construction contracts and sub-contracts, and particularly non-construction packages would have a much stronger local and regional element, with a substantial proportion of construction value retained in the local economy through wages to home-based workers.

8.55 Combining the above analysis provides the following total local employment by broad sector relating to the Moorside development up to 2038. The peak year for job creation is 2035 when 3,353 jobs are supported in the local economy – 1,780 of these direct construction jobs at the site.

Figure 29. Moorside – Total Local Employment by Sector, 2029-38



8.56 The development of SMR and AMR technology is without precedent in the UK. Estimating the economic impact of these developments on the local economy is, as far as we are aware, without precedent. It is therefore difficult to estimate these impacts in a robust manner at a district level. For example, a key feature of SMRs is their prefabricated nature which eases the construction process, but may mean fewer local jobs during the construction phase.

8.57 However, EDF have provided indicative land use areas for these developments are likely to require in future, and take this as an alternative approach to considering future employment land requirements for these developments.

8.58 NuScale, a leading SMR developer, claim to be able to generate 1,000MW of electrical energy in an area 0.14 square miles (0.36 square km), but this does not include the required surrounding site area. Rolls Royce SMR design is quoted that a 400-500 MW unit would require approximately 1.5 acres in size, and estimate a surrounding land requirement of 10-acre space (0.04 square km).

8.59 There is less certainty about the land footprint for AMRs, and we understand that this technology, and therefore its land requirements, is still developmental. However, it is expected that an AMR facility would have a similar or smaller land footprint than SMR.

8.60 The land area needed for large-scale Direct Air Capture (DAC) deployment depends on the type of DAC system and the energy resource powering it. Existing studies of the land requirements for DAC do not account for nuclear as the energy source, however it is anticipated the size would be in the same ballpark as the Carbon Engineering plans. Carbon Engineering (using liquid solvent and natural gas solution), require an area estimated at 150-300 acres (0.6-1.2 square km). DAC with renewables would have a considerably larger land use.

8.61 These technologies are very developmental and there remains considerable uncertainty regarding their precise land use requirements. Therefore while the above indicative land use requirements should be taken into account, these should be treated as indicative. Similarly, it has not been possible at this stage to incorporate a robust estimate of employment arising

from this element of the development into the wider analysis, and this should form part of a future economic needs assessment.

8.62 We therefore recommend the Council retains a level of flexibility to support and enable these developments coming forward and continues to engage with the consortia to update their requirements as these develop.

d) Woodhouse Colliery

8.63 Planning approval for the development of the colliery was granted in March 2019 by Cumbria County Council and was subsequently ratified again in October 2019. However, in March 2021 the Secretary of State wrote to the County Council to call-in the application for his own determination.

8.64 The Secretary of State explained the decision to call-in was due to the recently published Climate Change Committee's recommendations for the 6th Carbon Budget, and increasing controversy about the application. Overall the Secretary of State considers that this application raises planning issues of more than local importance, and will be heard at local inquiry.

8.65 There is therefore considerable uncertainty regarding whether the Woodhouse Colliery development will go ahead within the Plan period, or at all. However, without prejudicing this decision, this section considers the implications that the development of the colliery might have on jobs growth in Copeland, if it were to come forward within the Plan period.

8.66 This analysis has been informed by stakeholder engagement with West Cumbria Mining (WCM) who anticipate the colliery supporting 500 direct jobs at the site once fully operational and a further 2,000 jobs within the wider economy. However, WCM did not provide further details of these types of jobs or their location, other than that they would most likely be within the UK.

8.67 To estimate the quantum of the supply chain jobs which are likely to be retained in Copeland, two approaches have been considered based on the data from OE's Economic Impacts of Sellafield (Oxford Economics, 2017). This shows that the number of indirect and induced jobs supported in Copeland is equal to 92% of the direct jobs at the Sellafield site. Conversely, 31% of the indirect and induced jobs nationally are located within Copeland. Using these two approaches gives a range for the number of supply chain jobs for Woodhouse Colliery as between 460-617 jobs, with the mid-point being 538 jobs.

8.68 This means, once fully operational the colliery would support an additional 1,038 local jobs within Copeland. All direct jobs would be within the Extraction and mining sector. The sectoral split of the supply chain jobs has been estimated in accordance with that used for the Cumbria Clean Energy Park set out above. This results in the following jobs growth associated with the Woodhouse Colliery by 2038:

Table 40. Woodhouse Colliery Local Jobs Growth, 2021-38

Sector	Copeland Jobs Growth 2021-38
Extraction and Mining	500
Manufacturing	74
Construction	175
Transport and storage	74
Professional, Scientific & Technical	91
Business Administration and Support Services	124
Total Copeland Jobs	1,038

e) Smart Growth, North Shore, AI Campus

8.69 This development is tied into the growth of a number of initiatives focussed around the development of a big data campus and/or AI cluster which could see growth beyond that seen historically in Copeland. Stakeholder interviews with Disrupteive, BEC, and CBC Economic Development officers have suggested these projects could be supported at the North Shore or similar development. These projects have potential to act as a catalyst for growth in high tech sectors:

8.70 Digital grid / big data campus:

- IT and communications
- Computer programming, and consultancy sectors

8.71 Artificial Intelligence: Looked at the key sectors at Culham Science Centre in Oxfordshire:

- Scientific R&D
- Architectural and engineering
- Activities of head offices
- Specialised construction
- Wholesale trade
- Manufacture of electrical equipment

8.72 There is a considerable overlap with some of the above sectors and those identified as the key sectors within the Sellafield supply chain. Any uplifts to these sectors must be considered carefully to avoid multiple uplifts beyond what is realistic. These sectors have already been included within the uplift to the Sellafield Main Supply Chain Sectors set out in sub-section b and so have been excluded from further uplift here to avoid double counting.

Table 41. Potential Growth Sectors and Prevalence in Copeland

Sector	Science Centre Profile	Sellafield Main Supply Chain?
Scientific research and development	49.8%	No
Architectural and engineering activities	15.7%	Yes
Activities of head offices	13.6%	Yes
Specialised construction activities	4.4%	Yes
Wholesale trade	4.4%	Yes
Manufacture of electrical equipment	4.2%	No
Office and business support	2.1%	Yes
Construction of buildings	1.7%	Yes
Computer programming and consultancy	1.6%	Yes
Services to buildings and landscape	1.2%	No
Trade & repair of motor vehicles	1.1%	No

Source: BRES, 2019

8.73 Taking forward only the sectors which are not included within the Sellafield Main Supply Chain Sectors allows us to estimate the potential uplift that the development of a big data campus or AI cluster might have to the other sectors listed above. This results in the following jobs growth profile by 2038:

Table 42. Big Data Campus / AI Cluster – Jobs Growth 2021-38

Sector	Jobs Growth 2021-38
Professional, Scientific and Technical	289
Wholesale Trade	7
Manufacturing	24
Business Support Services	7
Total	**327**

f) Growth Scenarios Summary

8.74 The five Growth Scenarios set out above consider the local employment implications of five future development scenarios. Given the nature of these projects, there is considerable uncertainty as to which, or indeed if any, are to proceed within the Plan period.

8.75 In order to not prejudice this, the Growth Scenarios have therefore been set out as discrete scenarios with jobs growth figures attached to each. This will allow the Council maximum flexibility to plan for future jobs growth depending on which pipeline projects come forward. This notwithstanding, Table 43 provides a summary of the employment implications of each of the Growth Scenarios.

8.76 The overall jobs growth figures for each of the Growth Scenarios are set out in Table 43. Note that for the Clean Energy Park the jobs associated with the construction phase are considerably higher than the operational phase and so the level of employment peaks in 2035 and then declines towards the end of the Plan period. For Sellafield off-siting there is no additional employment, but 1,364 existing jobs at the Sellafield site will be relocated within

Copeland.

8.77 In total all of the Growth Scenarios combined equate to additional employment growth of 4,923 jobs in Copeland by 2038. This includes new direct jobs at the Clean Energy Park and Woodhouse Colliery as well as jobs in the wider supply chain which would take place at a range of B Class employment, and non-B Class sites.

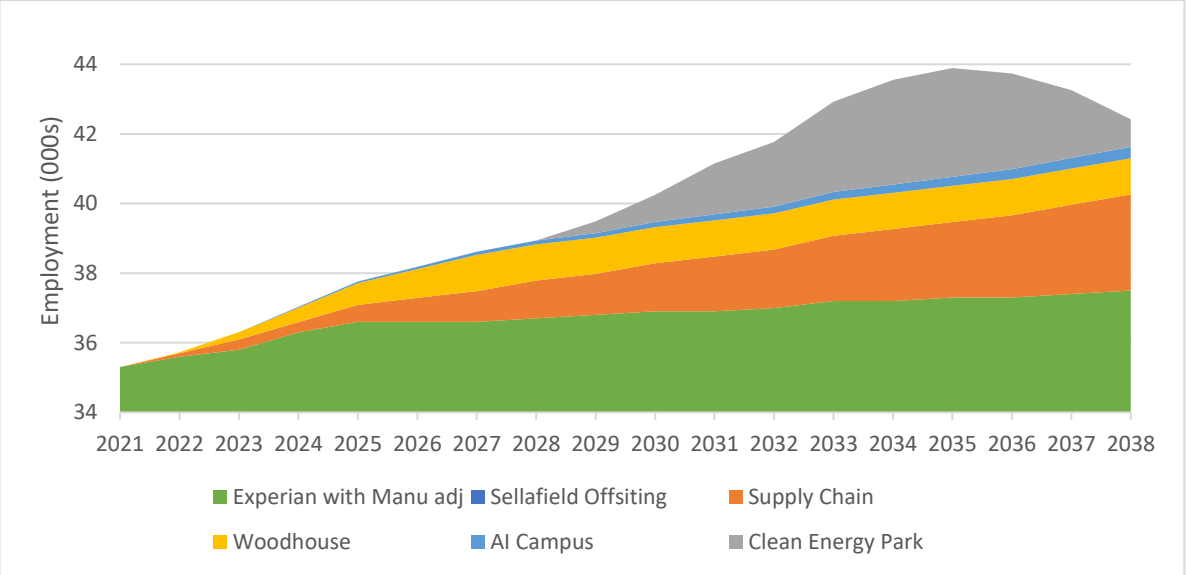
8.78 The increase in annual growth rate for each scenario has been calculated comparing each scenario individually against the growth rate of growth shown in the Experian forecast (with adjustment for manufacturing) which shows a growth rate of 0.4% per annum. This shows that over the period to 2038 the sum of the Growth Scenarios results in an average annual growth rate of 0.7% over the Experian forecast, meaning a 1.1% growth rate per annum. This is commensurate with Copeland's employment growth seen over the 2011-21 period which was around 1.0-1.4% per annum.

Table 43. Employment Growth – Growth Scenarios 2021-38

Project	Employment Growth 2021-38	Increase in Annual Growth Rate
Sellafield Off-Siting	No additional employment, 1,364 relocated	0%
Sellafield Supply Chain	2,762	0.4%
Clean Energy Park	3,123 at peak employment in 2035	0.6% pa to 2035
Woodhouse	1,038	0.2%
AI Campus	327	0.05%
All Growth Scenarios	**4,923**	**0.7%**

8.79 The figure below shows the profile of growth of each of the Growth Scenarios by year over the Plan period. This is particularly useful in illustrating the bell curve of jobs growth at the Clean Energy Park as well as the relative scale of each of the scenarios.

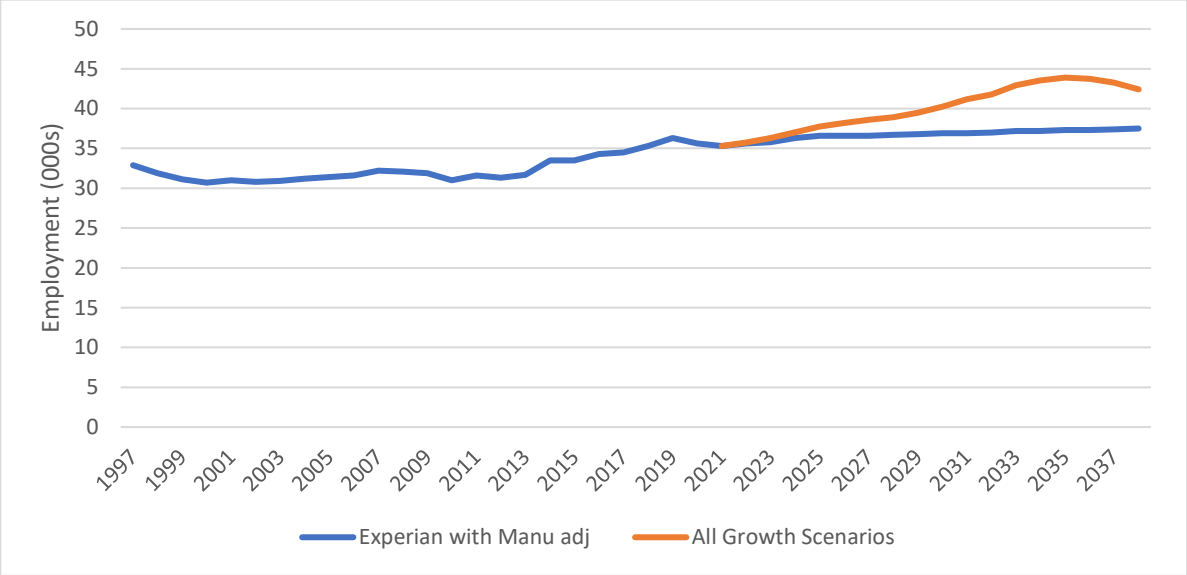
Figure 30. Employment Growth – Growth Scenarios 2021-38



8.80 Figure 31 provides further context of the Growth Scenarios against the Experian scenario (with manufacturing adjustment) and against the longer-term employment trend for Copeland back to 1997. This shows the Growth Scenario is more in-line with the recent growth trend

in Copeland than the adjusted baseline scenario.

Figure 31. Growth Scenarios vs Longer Term Growth Trend Copeland 1997-2038



Source: Experian and SPRU analysis

8.81 In terms of sectoral growth, each of the Growth Scenarios have disaggregated growth down to the sectoral level. This is summarised for all of the Growth Scenarios in the table below.

Table 44. Employment Growth by Sector – Growth Scenarios 2021-38

Sector	Employment Growth 2021-38
Administrative & Supportive Services	1,090
Civil Engineering	183
Computer & Electronic Products (manufacture of)	96
Computing & Information Services	103
Construction of Buildings	818
Extraction & Mining	500
Land Transport, Storage & Post	147
Machinery & Equipment (manufacture of)	219
Metal Products (manufacture of)*	-1,364
Professional Services	1,609
Public Administration & Defence	816
Specialised Construction Activities	701
Wholesale	7
Total	**4,923**

*Denoting jobs at the Sellafield site

9.0 RISKS OF BREXIT AND COVID-19

a) Risks Due to Brexit

9.1 The UK voted to leave the EU in a referendum vote in June 2016 with the UK eventually leaving in January 2020. A yearlong 'transition period' followed which lasted until the end of 2020. Negotiations between the UK and the EU regarding longer-term trade deals are currently ongoing.

9.2 At the macroeconomic level, Brexit will inevitably have numerous implications for the UK's economy. However, the nature of the political arrangement between the UK and the EU following Brexit remains unclear, and therefore forecasting the economic implications of Brexit is a difficult process.

9.3 This notwithstanding, all three forecasting houses have incorporated the implications of Brexit into their forecasting approaches. The various models estimate the impacts of Brexit based on what they consider to be the most likely outcomes, given announcements and published reports by think-tanks, non-profit organisations and the UK Government.

9.4 However, the political particulars of the future relationship with the EU have not been agreed, and so at this point in time there is no greater certainty on the assumptions in the forecasts:

- The UK agrees a bespoke deal with the EU;
- The UK secures an ability to reduce EU migration;
- The UK can remain in the single market for goods but not services (so there is no financial services passporting); and
- There are likely to be some continued payments for access to the EU from the UK (although these are negligible in macroeconomic terms).

9.5 These assumptions have been converted into economic modelling assumptions, which provide inputs for the model used in the forecasting process. For the purposes of forecasting, the macroeconomic impacts of Brexit are considered in terms of three main factors: exports, workforce, and investment.

9.6 Table 45 presents CE's overview of the specific long-term economic assumptions of the impacts of Brexit by broad sector:

Table 45. Sectoral Brexit Risk Rating

Sector	Export Impact	Workforce Impact	Investment Impact
Agriculture	Mild slowdown in EU demand	Strong employment constraints	Mild slowdown in investment
Mining and Quarrying	No specific impact	Moderate employment constraints	Moderate to pronounced slowdown in investment
Low and medium-low tech manufacturing	Mild slowdown in EU demand	Moderate employment constraints	Moderate to pronounced slowdown in investment
High and medium-high tech manufacturing	Mild to moderate slowdown in EU demand	Moderate employment constraints	Moderate to pronounced slowdown in investment
Construction	Mild slowdown in EU demand	Moderate employment constraints	Moderate to pronounced slowdown in investment
Utilities and energy	Mild slowdown in EU demand	Moderate employment constraints	No specific impact
Transport, distribution, retail and wholesale trade	Moderate to pronounced slowdown in EU demand	Strong employment constraints	Moderate to pronounced slowdown in investment
Accommodation and food service	Moderate to pronounced slowdown in EU demand	Strong employment constraints	Moderate to pronounced slowdown in investment
Administrative and support services	Moderate to pronounced slowdown in EU demand	Strong employment constraints	Moderate to pronounced slowdown in investment
Information and communication	Pronounced slowdown in EU demand	No specific impact	Moderate to pronounced slowdown in investment
Financial and insurance	Pronounced slowdown in EU demand	No specific impact	Moderate to pronounced slowdown in investment
Real estate	Pronounced slowdown in EU demand	No specific impact	Moderate to pronounced slowdown in investment
Professional, scientific and technical	Pronounced slowdown in EU demand	No specific impact	Moderate to pronounced slowdown in investment
Government services	Mild slowdown in EU demand	Moderate employment constraints	Mild slowdown in investment
Arts, recreation, and other services	Mild slowdown in EU demand	Moderate employment constraints	Mild slowdown in investment

Source: CE

9.7 Aggregating the results for each of the three impacts shows the following sectors are the most at risk sectors due to Brexit:

- Transport, distribution, retail and wholesale trade
- Accommodation and food service
- Administrative and support services

9.8 The following sectors are at moderate risk due to Brexit:

- Agriculture
- Mining and quarrying
- Low and medium-low tech manufacturing
- High and medium-high tech manufacturing
- Construction
- Information and communication
- Financial and insurance
- Real estate
- Professional, scientific and technical

9.9 The following sectors are at low risk due to Brexit:

- Utilities and energy
- Government services
- Arts, recreation, and other services

9.10 This analysis has been used to identify the scale of risk in the current sectoral profile of Copeland and in the jobs growth forecasts for Copeland over the period 2021-38. The scale of jobs growth in each sector is set out in the table below along with the risk rating identified above.

9.11 However, a significant proportion of the jobs classed as moderate risk are due to the jobs at Sellafield which are classified within the Manufacturing sector. However, the stakeholder feedback undertaken as part of this EDNA has repeatedly confirmed that the current operations and future job prospects at Sellafield are primarily driven by the current mission of nuclear decommissioning and this is less influenced by the UK's relationship with the EU than other markets and more resilient to short term changes than the majority of other sectors. Therefore the jobs at Sellafield itself, which comprise a significant proportion of jobs in the 'moderate risk due to Brexit' category in Copeland, can be considered lower risk. However other jobs in the sector should be considered more in-line with the trends for the sector more generally and are therefore considered moderate risk.

Table 46. Sectoral Brexit Risk Rating, Copeland

Sector	Total Jobs 2021	Forecast Jobs Growth 2021-38				Brexit Risk
		CE	OE	Experian	Growth	
Agriculture and mining	600	0	-100	0	500	Med
Manufacturing	11,600	-900	-1,400	0	-1,000*	Med
Electricity, gas & water	300	0	0	-100	0	Low
Construction	3,000	0	0	100	1,700	Med
Wholesale and retail trade	2,900	100	-300	100	0	High
Transport & storage	700	0	-100	100	100	High
Accommodation & food services	2,000	600	0	400	0	High
Information & communications	0	100	0	0	100	Med
Financial & business services	4,800	600	400	400	2,700	Med
Government services	8,100	600	-500	1,100	800	Low
Other services	1,300	-100	0	100	0	Low
Total	35,300	1,000	-2,000	2,200	4,900	

*includes -1,364 jobs currently at the Sellafield site relocated elsewhere in Copeland

9.12 Tables 47 and 48 sum the total number of jobs growth forecast in Copeland categorised by the identified risk rating due to Brexit. This is shown in the tables by total jobs growth and the proportion of jobs in each risk rating.

9.13 The tables show that currently over half (57%) of jobs in Copeland are in the moderate risk category (with a significant quantum due to jobs at Sellafield), while 27% are in low-risk sectors, and only 16% in high-risk sectors.

9.14 Looking forwards, the level of jobs growth in the forecasts[10] differs dependent on the forecast. The CE and Experian forecasts both show a considerable quantum of growth in high-risk sectors – principally the Accommodation and food service sector – with Experian also showing greater growth in the Low and Medium Risk sectors. OE shows significant job losses in all risk categories – reflecting OE's more negative outlook due, in part, to Brexit. The vast majority of growth shown in all the elements of the Growth Scenario fall within the Moderate risk categories with very little in the high-risk category.

9.15 Overall, this analysis suggests that the majority of existing jobs within the Copeland economy are not considered to be at high risk of negative consequences of Brexit. However, the CE and Experian forecasts do indicate significant growth in Accommodation and food service sector which is high risk and is also at high risk due to the impacts of Covid (as set out in the following section).

Table 47. Jobs by Brexit Risk Rating, Copeland

	Total Jobs 2021	Forecast Jobs Growth 2021-38			
		CE	OE	Experian	Growth
High	5,600	700	-400	600	100
Moderate	20,000	-200	-1,100	500	4,000
Low	9,700	500	-500	1,100	800

Table 48. Proportion of Jobs by Brexit Risk Rating, Copeland

	Total Jobs 2021	Forecast Jobs Growth 2021-38			
		CE	OE	Experian	Growth
High	16%	70%	N/A	27%	2%
Moderate	57%	-20%	N/A	23%	82%
Low	27%	50%	N/A	50%	16%

b) Stakeholder Views on Brexit

9.16 The stakeholder feedback was unanimous in not expecting Brexit to have a major impact on Copeland's future economic prospects. The primary reason for this is that the main economic drivers in Copeland – the ongoing mission at Sellafield, the related supply chain, and the nuclear sector in general – are considered to be less impacted by trade with the EU than the majority of the UK's economy.

9.17 The mission at Sellafield is ongoing and is expected to continue well after the end of the Plan period. This provides a reliable source of economic activity which is geographically tied to the location. The challenge of retaining supply chain outputs within Copeland was largely considered as a competition with other regions of the UK and so unaffected by Brexit.

9.18 Stakeholders felt that the nuclear supply chain sector was less affected by the changing market fluctuations than other sectors. It was felt that this helped insulate the sector from

[10] Adjusted to account for discrepancies in the Manufacturing sector

short-term volatility from events such as Covid and Brexit, giving more time for a deal for the details of a deal between the UK and the EU and other trading partners to be agreed before any short-term impacts are felt.

9.19 Stakeholders reported that during discussions with prospective international businesses potentially looking to move into the UK in Copeland, Brexit had not been mentioned as an issue – either positive or negative – affecting their consideration.

c) Risks Due to COVID-19

9.20 In the first half of 2020 the UK was hit by the Coronavirus (COVID-19) pandemic which has had a significant impact on the global, national, and local economy. The forecasts used in this assessment take account of the impact of COVID-19. However, the full scale of the impact is currently still emerging and, due to the unprecedented nature of the event, the future impact remains highly uncertain.

9.21 This section considers the impact that COVID-19 might have on Copeland's economy, including:

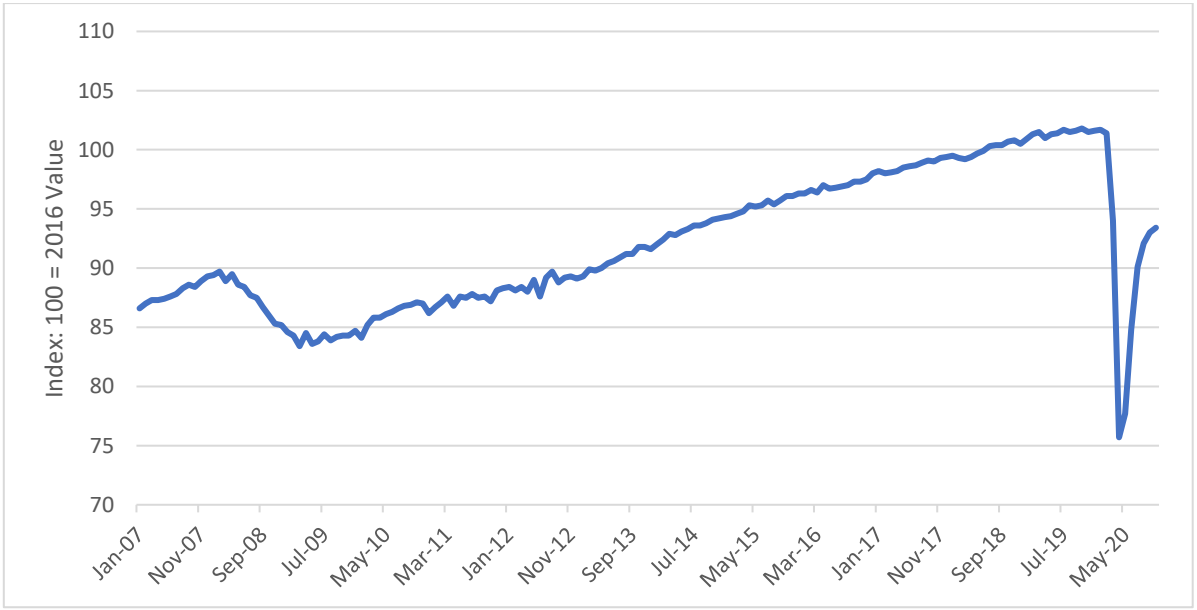
- The risk to existing jobs and job creation in different sectors of the economy; and
- The impact on employment land requirements, to support growth sectors, due to changes in working patterns and increased home working.

9.22 The data and analysis in this section is up to date at the time of writing. However the fast changing pace of developments both in terms of the virus itself as well as the Government's policy response means that the analysis in this section could quickly become superseded by events. We recommend the Council closely monitor the official economic indicators and Government guidance as they are published.

d) Impact on Employment

9.23 The latest monthly national GDP figures published by ONS show the impact of COVID-19 and the ensuing lockdown had on the national economy. This shows a drop of 27% between January and April 2020. However this was followed by 3 months of continuous growth although the latest figures for October 2020 show this appears to be slowing.

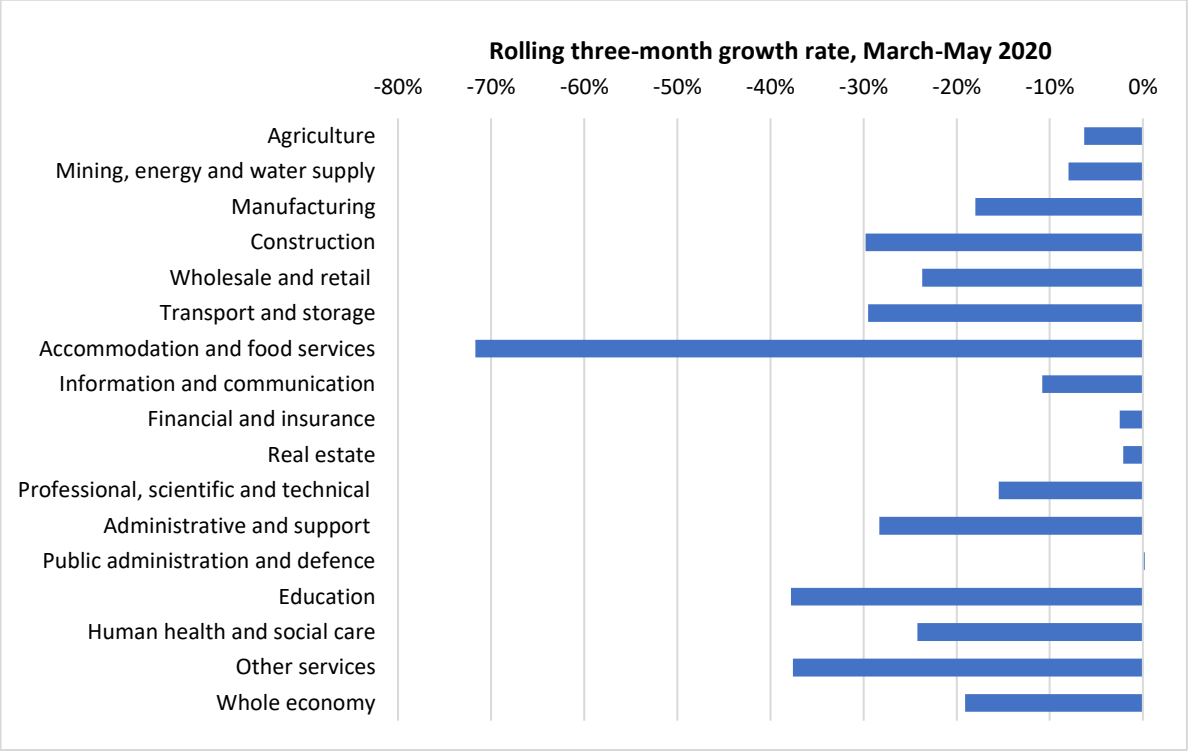
Figure 32. Monthly GDP, Jan 2007-Oct 2020, UK



Source: Source: ONS

9.24 Nationally, all sectors have seen a reduction in GDP with the exception of Public administration and defence which has seen zero growth. Across all sectors GDP was down 19.1% over the period from March-May 2020. The Accommodation and Food Service sector has been hardest hit with a GDP contraction of -70% through this period reflecting the fact that the majority of businesses in the sector have been closed throughout this time.

Figure 33. GDP by Sector, March to May 2020, UK



Source: Source: ONS GDP monthly estimate

9.25 Predicting the longer-term impacts that COVID might have on the economy will be an important exercise to inform a wide range of disciplines, including land use planning. However, given the lack of precedent for a pandemic of this scale in modern times, forecasting future economic performance remains highly uncertain. This high level of uncertainty is due to a range of factors, the majority of which pose significant downside risks:

- **Long-term changes to market confidence and consumer attitudes to spending.** The current crisis results in less confidence in spending and risk-taking behaviour resulting in a long-running adverse effect on investment, entrepreneurship and innovation, weighing on the productive capacity of the economy. This could mean the long-term damage to the UK economy proves more significant than expected.
- **Economic recovery is heavily reliant on intervention of government policy.** Any changes to government policy or spending would have significant impacts, more so than usual.
- **Impact on negotiating post-Brexit deals.** The UK continues to negotiate its future trade deals with the EU and many other countries worldwide. However, the disruption caused by COVID-19 has meant a necessary switch of political priorities delaying this process.

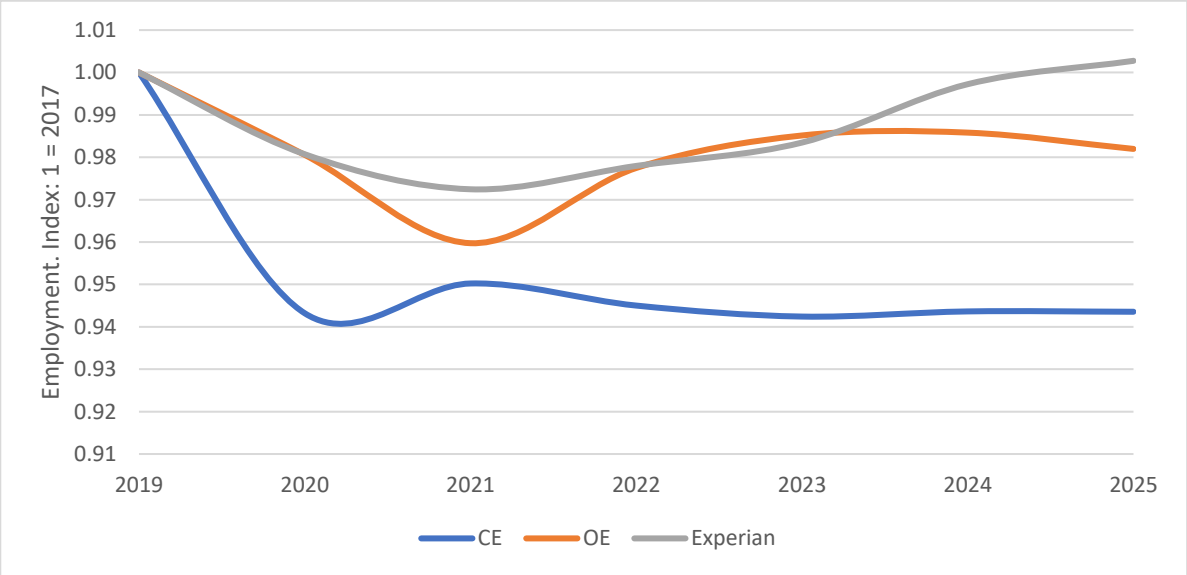
9.26 The economic downturn related to Covid is the result of a series of planned partial shutdown of the economy rather than due to imbalances in the private sector or public sector policy mistakes, which are more usual causes for entering a recession. Similarly, unlike a natural disaster there is no damage to the country's physical capital, such as buildings and

infrastructure. This means the fundamentals of the economy can be regarded as stronger than is typical for an economy entering recession.

9.27 This provides optimism that there could be a strong 'bounce back' once restrictions are lifted and consumer spending and confidence returns. The size and duration of this bounce depends on consumer confidence and mindset, as well as retaining the means to spend. This will depend in part on how long restrictions are in place and the effectiveness of policies to maintain existing companies and jobs.

9.28 The scale of bounce differs between the forecasts. It is most prominent in the OE and Experian forecasts with employment levels in Copeland returning to 98% of pre-Covid levels by 2022 in both forecasts. The Experian forecast then shows continued growth exceeding pre-Covid levels by 2025, while the OE forecast begins tailing off by 2025. The CE forecast forecasts a relatively small bounce in the latter half of 2021 as restrictions are lifted, however in the CE forecast this is relatively modest.

Figure 34. Short-Term Employment Forecast, Copeland 2019-2025



Source: Analysis of CE, OE, and Experian

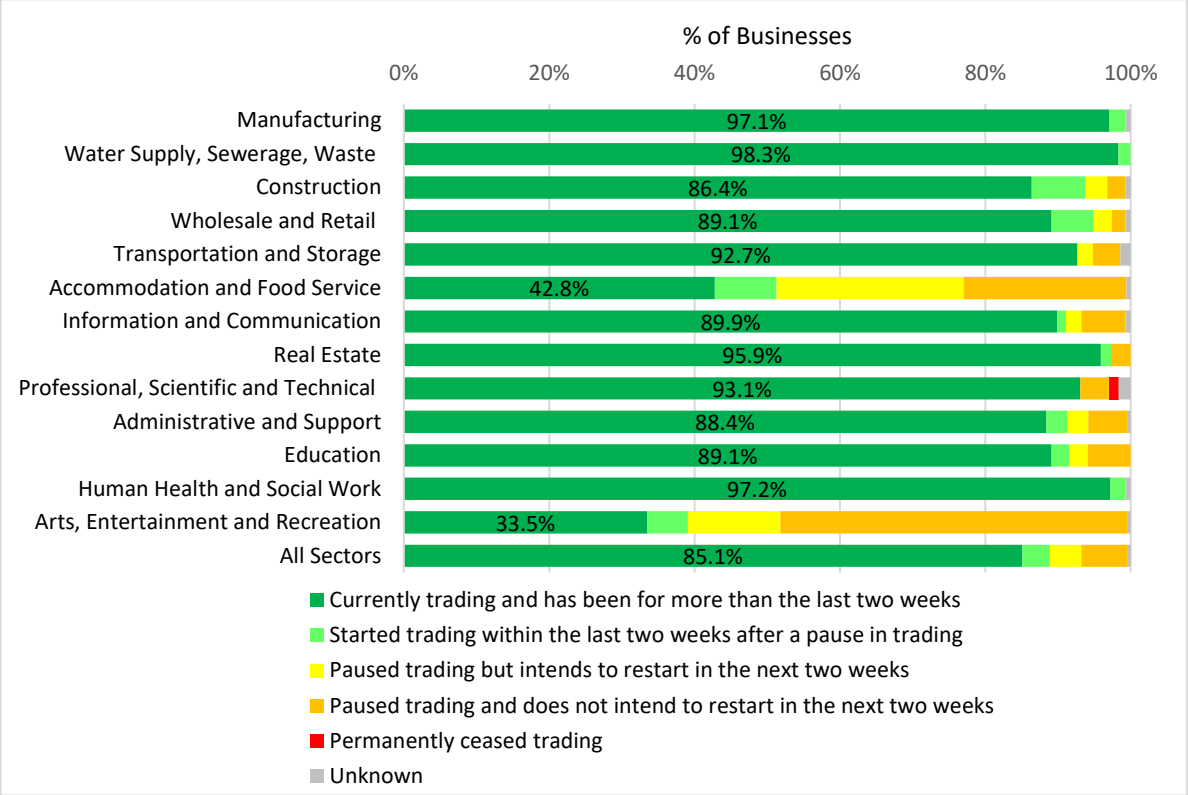
9.29 Some sectors will be affected much more than others. For many service sectors, GDP has been lost permanently. For example, accommodation and food services not purchased during lockdown have been lost for ever. Conversely, spending on durable goods, such as cars, may have simply been deferred, which would lead to a post-lockdown bounce in demand and production.

9.30 There are a number of characteristics of an economy which will be more or less susceptible to the impacts of COVID-19. Data from the Business Impact of Coronavirus Survey (BICS) was produced by ONS during the peak of the Covid pandemic to assess the impact COVID-19 has had on different sectors of the economy. The BICS provides data on a range of economic performance indicators, but should not be treated as providing an indication of long-term economic performance or employment trends. The data do show which sectors have been hardest hit by COVID-19.

9.31 Figure 35 shows the trading status of businesses in each sector as of June 2020. This shows that 85.1% of all businesses were continuing to trade and had been for more than the previous two weeks. This figure increases to 88.9% when including businesses which had resumed trading in the previous two weeks.

9.32 However, there are two sectors where this figure is considerably lower. For Accommodation and Food Service just 51.3% of businesses are currently trading. For Arts, Entertainment and Recreation this figure is even lower at 39.1%.

Figure 35. Business Trading Status, UK

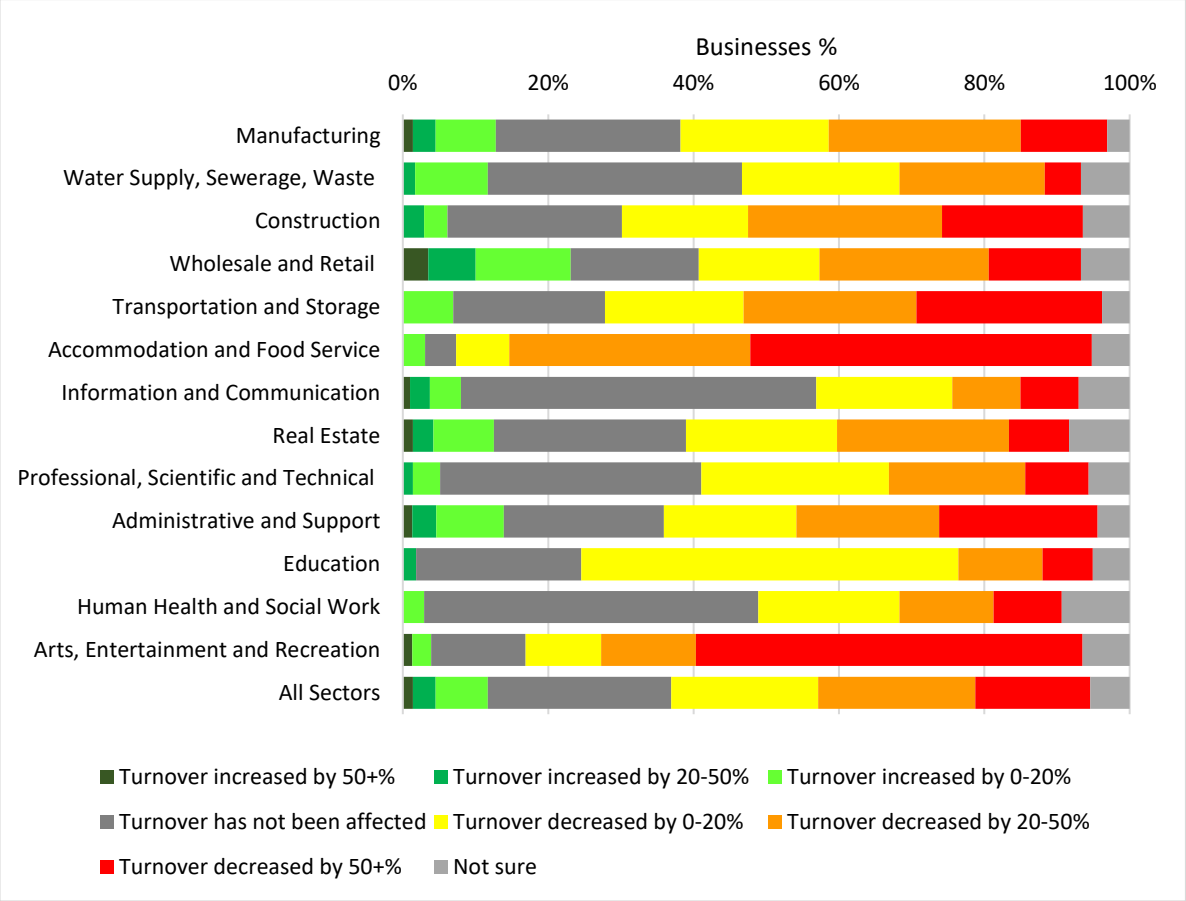


Source: Source: ONS BICS June 2020

9.33 Figure 36 shows the reported change in turnover in 2020 compared to the same period in 2019. Across all sectors, 57.6% of businesses reported a drop in turnover. The data again shows the worst hit sectors have been the Accommodation and Food Service sector (86.0% reporting lower turnover), and the Arts, Entertainment and Recreation sector (76.6% lower). However, the following sectors all had the majority of businesses reporting a lower turnover compared to 2019:

- Accommodation and Food Service (86.0%)
- Arts, Entertainment and Recreation (76.6%)
- Education (69.3%)
- Transportation and Storage (67.1%)
- Construction (62.9%)
- Administrative and Support Services (59.6%)
- Manufacturing (58.7%)
- Professional, Scientific and Technical (53.1%)
- Real Estate (52.7%)
- Wholesale and Retail (52.6%)

Figure 36. Change in turnover from same time in 2019, UK



Source: Source: ONS BICS June 2020

9.34 One of the key factors affecting businesses who are continuing to trade is the decreasing availability and increasing cost of importing and exporting goods. This has particularly impacted businesses who trade overseas due to differing restrictions of trade and movement in different jurisdictions, and different countries enforcing and relaxing lockdown restrictions at different times.

9.35 Overall, nearly half (44.6%) of businesses reported having challenges relating to exporting. The sectors most widely hit have Transportation and Storage, Wholesale and Retail trade, and Manufacturing.

Table 49. COVID impacts on exporting[11]

	Manufacturing	Wholesale and Retail Trade	Transportation and Storage	Information and Communication	Professional, Scientific and Technical	Administrative and Support	Education	All Sectors
Coronavirus-related transport restrictions	22.5%	25.0%	55.0%	17.4%	21.1%	21.7%	50.0%	23.9%
Increases in transportation costs	28.7%	33.6%	35.0%	15.2%	9.2%	13.0%	10.0%	25.5%
Closure of infrastructure used to export goods or services	7.9%	16.4%	40.0%	10.9%	3.9%	8.7%	0.0%	10.0%
Destination countries changing their border restrictions	9.6%	14.3%	45.0%	17.4%	10.5%	17.4%	10.0%	12.3%
Other	2.0%	2.1%	10.0%	2.2%	9.2%	8.7%	0.0%	3.5%
Did not experience any challenges with exporting	58.2%	50.0%	30.0%	56.5%	59.2%	52.2%	40.0%	55.4%

Source: Source: ONS BICS June 2020

9.36 Restrictions on imports have had a similar impact to a wide range of sectors with Transportation and Storage, Administration and Support, Wholesale and Retail trade, and Manufacturing most affected.

Table 50. COVID impacts on importing

	Manufacturing	Construction	Wholesale and Retail	Transportation and Storage	Information and Communication	Professional, Scientific and Technical	Administrative and Support	Education	All Sectors
Coronavirus-related transport restrictions	27.8%	20.0%	26.6%	50.0%	18.8%	21.6%	30.0%	41.2%	27.7%
Increases in transportation costs	28.8%	10.0%	32.4%	40.9%	15.6%	13.7%	20.0%	5.9%	27.1%
Closure of infrastructure used to import goods or services	8.7%	20.0%	14.4%	22.7%	12.5%	7.8%	13.3%	0.0%	10.9%
Source countries changing their border restrictions	8.4%	0.0%	9.0%	40.9%	9.4%	9.8%	13.3%	5.9%	10.2%
Other	2.3%	0.0%	4.5%	0.0%	9.4%	7.8%	0.0%	0.0%	3.7%
Did not experience any challenges with importing	53.8%	70.0%	46.4%	40.9%	53.1%	60.8%	53.3%	58.8%	51.6%

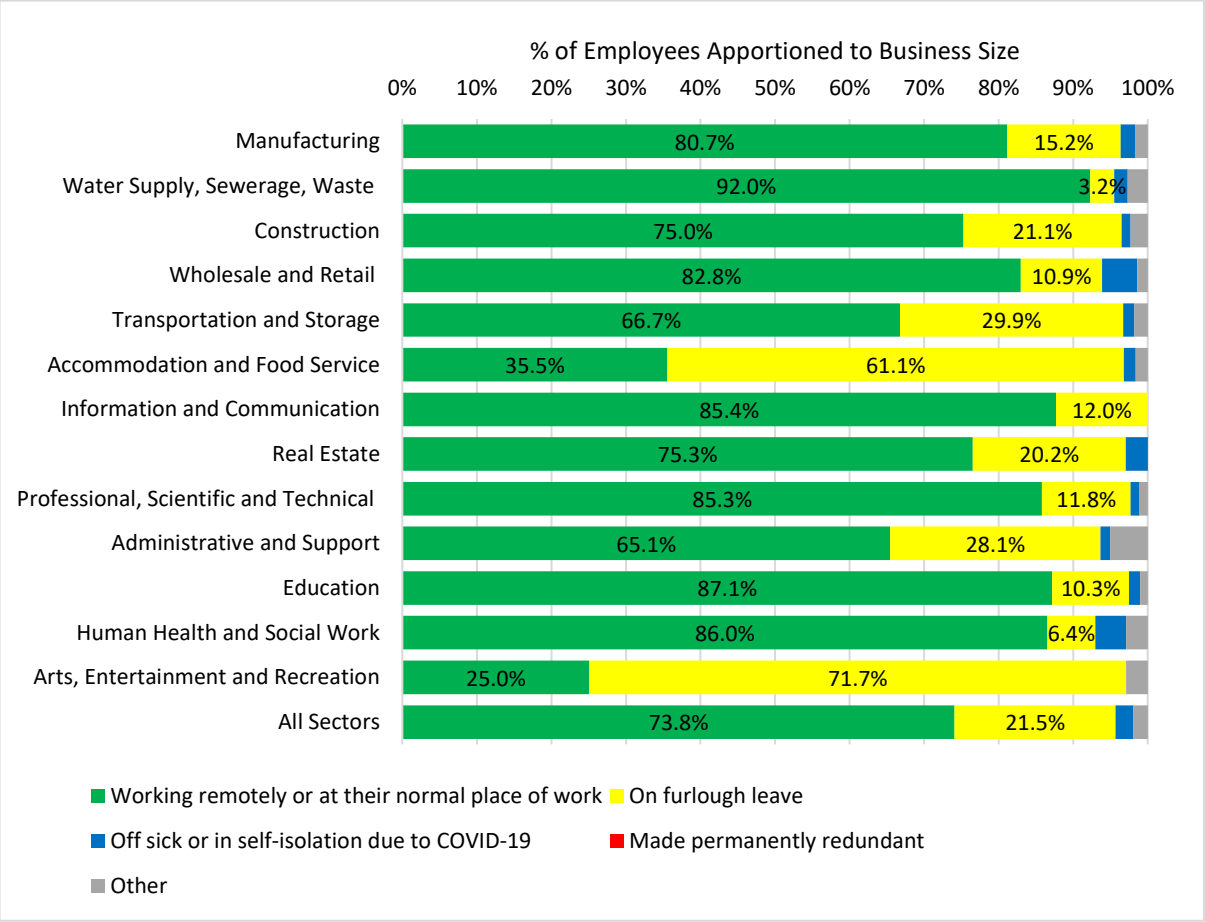
Source: Source: ONS BICS June 2020

[11] Data for the Construction sector not available, most likely due to low level of exports within the sector.

9.37 This challenging economic environment has had a significant impact on businesses' ability to retain employees. Figure 37 shows the employee status of all businesses which have not permanently stopped trading (i.e. including those continuing to operate or those who have temporarily ceased operations). This shows that across all sectors 21.5% of staff have been placed on furlough leave, while 73.8% continue to work (either at their normal place of work or remotely).

9.38 The data again shows the worst hit sectors have been the Accommodation and Food Service sector (61.1% on furlough), and the Arts, Entertainment and Recreation sector (71.7% on furlough). Other sectors which have seen higher than average rates of staff furloughing are Transportation and Storage (29.9%) and Administrative and Support Services (28.1%).

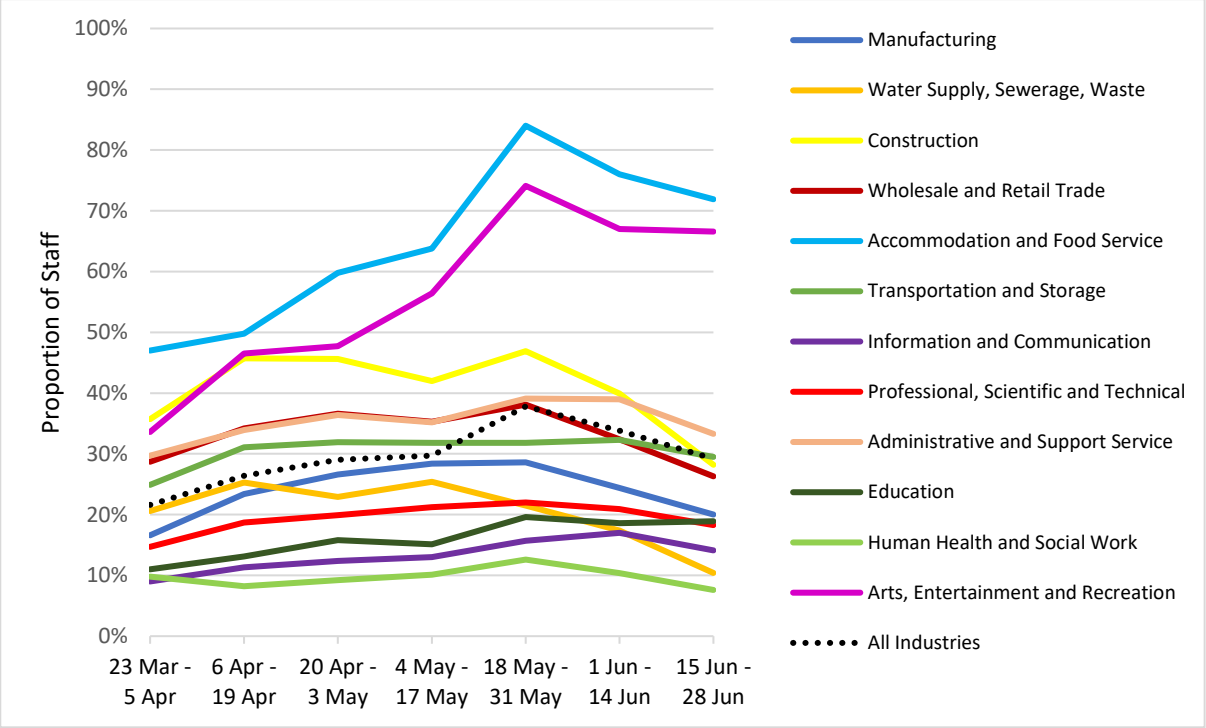
Figure 37. Employee Status



Source: Source: ONS BICS June 2020

9.39 Figure 38 shows the proportion of employees in each sector on furlough or sick leave due to COVID and how this has changed over time from March-June 2020. This shows the highest rate of non-working due to COVID was in late May 2020 and since then rates of people on either furlough or sick leave have dropped in almost all sectors. This is particularly evident in the Construction sector which has seen 19% of staff return to work over this period.

Figure 38. Proportion of Staff on Furlough or Sick Leave – Time Series



Source: Source: ONS BICS Mar-June 2020

9.40 The range of data set out above has been collated in the table below in terms of low, medium, and high risk for each element and sector. This is then aggregated to identify an overall level of risk for each sector.

Table 51. Sectoral Risk of COVID-19

	Trading Status	Turnover	Import/ Export	Employee Status	Overall Risk
Manufacturing	Low	Med	High	Low	Med
Water Supply, Sewerage, Waste	Low	Low	Low	Low	Low
Construction	Low	High	Med	Med	Med
Wholesale and Retail	Low	Med	High	Low	Med
Transportation and Storage	Low	High	High	Med	High
Accommodation and Food Service	High	High	Low	High	High
Information and Communication	Low	Low	Med	Low	Low
Real Estate	Low	Med	Low	Med	Med
Professional, Scientific and Technical	Low	Med	Med	Low	Med
Administrative and Support	Low	Med	Med	Med	Med
Education	Low	High	Med	Low	Low
Human Health and Social Work	Low	Low	Low	Low	Low
Arts, Entertainment and Recreation	High	High	Low	High	High

9.41 This analysis has been used to identify the scale of risk in the sectoral jobs growth forecasts for Copeland. The scale of jobs growth in each sector is set out in Table 52 along with the risk rating identified above.

Table 52. Sectoral COVID-19 Risk Rating, Copeland

	Total Jobs 2021	Forecast jobs growth 2021-38				COVID Risk
		CE	OE	Experian	Growth	
Agriculture, Mining, Quarrying	600	0	-100	0	500	Low
Manufacturing	11,600	-900	-1,400	0	-1,000	Med
Electricity, gas & water	300	0	0	-100	0	Low
Construction	3,000	0	0	100	1700	Med
Wholesale and retail trade	2,900	100	-300	100	0	Med
Transport & storage	700	0	-100	100	100	High
Accommodation & food services	2,000	600	0	400	0	High
Information & communications	0	100	0	0	100	Low
Financial & business services	4,800	600	400	400	2,700	Low
Government services	8,100	600	-500	1,100	800	Low
Other services	1,300	-100	0	100	0	High
Total	**35,300**	**1,000**	**-2000**	**2,200**	**4,900**	

9.42 Tables 53 and 54 sum the total number of jobs currently in Copeland and the level of growth forecast to 2038 categorised by the identified risk rating due to Covid. The data shows that for current jobs in Copeland only 11% are in the high-risk sectors, 50% in moderate-risk sectors, and 39% are in low-risk sectors.

9.43 For the forecast jobs growth, all of the other forecasts show the majority of future jobs growth is in the Low-risk sectors. The OE forecast shows an overall negative jobs growth over the period which means it is not possible to do a meaningful proportional analysis.

9.44 As with the Brexit risk analysis, the relatively high growth forecast in the Accommodation & food services sector in the CE and Experian forecasts means a relatively high proportion of growth in these forecasts is in the high-risk category. The Growth Scenario shows the majority of growth is in the low-risk category.

Table 53. Jobs by COVID Risk Rating, Copeland

	Total Jobs 2021	Forecast jobs growth 2021-38			
		CE	OE	Experian	Growth
High	4,000	500	-100	600	100
Moderate	17,500	-800	-1,700	200	700
Low	13,800	1,300	-200	1,400	4,100

Table 54. Proportion of Jobs by COVID Risk Rating, Copeland

	Total Jobs 2021	Forecast jobs growth 2021-38			
		CE	OE	Experian	Growth
High	11%	50%	N/A	27%	2%
Moderate	50%	-80%	N/A	9%	14%
Low	39%	130%	N/A	64%	84%

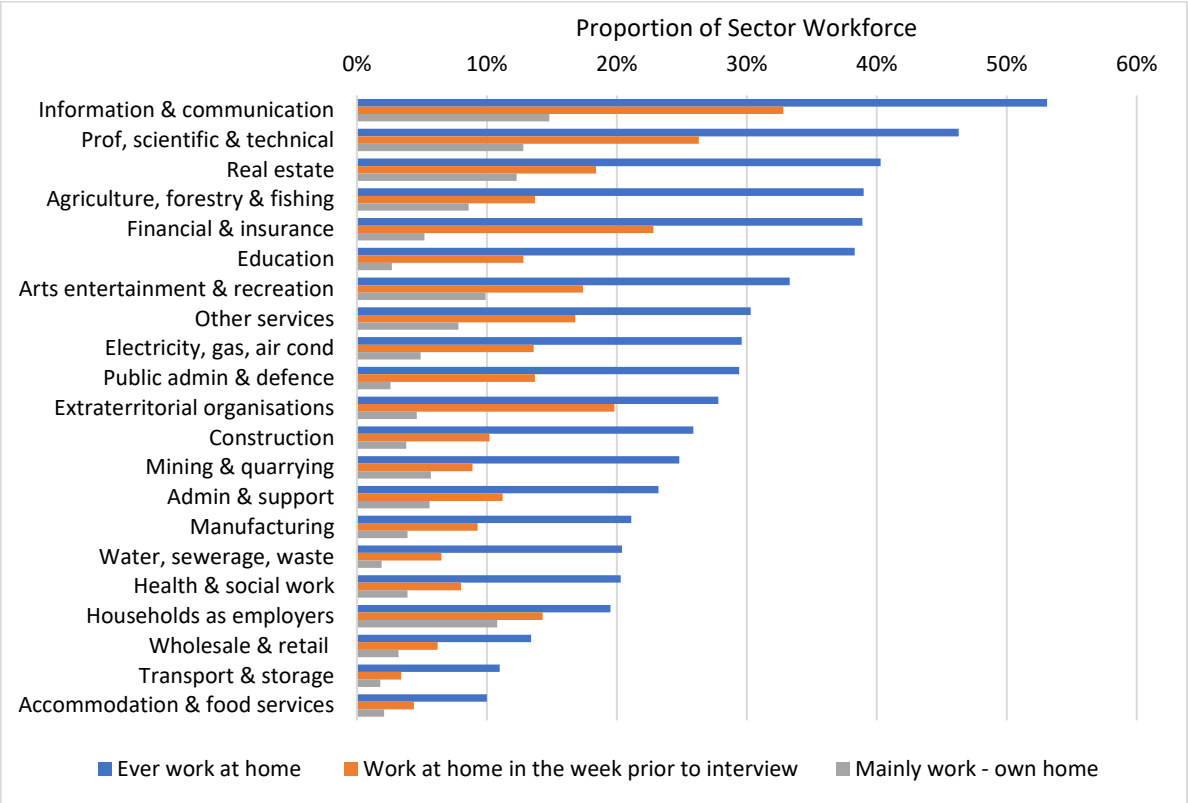
e) Changes to working practices

9.45 It is clear that COVID-19 has necessitated a large shift in the amount of home working. This change in working practices could have a significant impact on the quantum of employment space required to support existing and future jobs growth.

9.46 Figure 39 shows the proportion of home working in different sectors in 2019 and provides a useful baseline position pre-COVID. This shows that pre-COVID working from home was still relatively uncommon. This shows working from home is most prevalent in the Information and Communications sector, and this sector was the only one where more than half of the workforce (53%) had ever worked from home. Conversely, in the Accommodation and Food Service sector 90% had never worked from home.

9.47 There is a clear distinction between 'ever worked from home' and 'mainly work from home'. Even in the Information and Communications sector where 53% had ever worked from home, only 14.8% said that was their main working location. This was the highest of any sector. For the majority of sectors less than 5% of workers mainly worked from home.

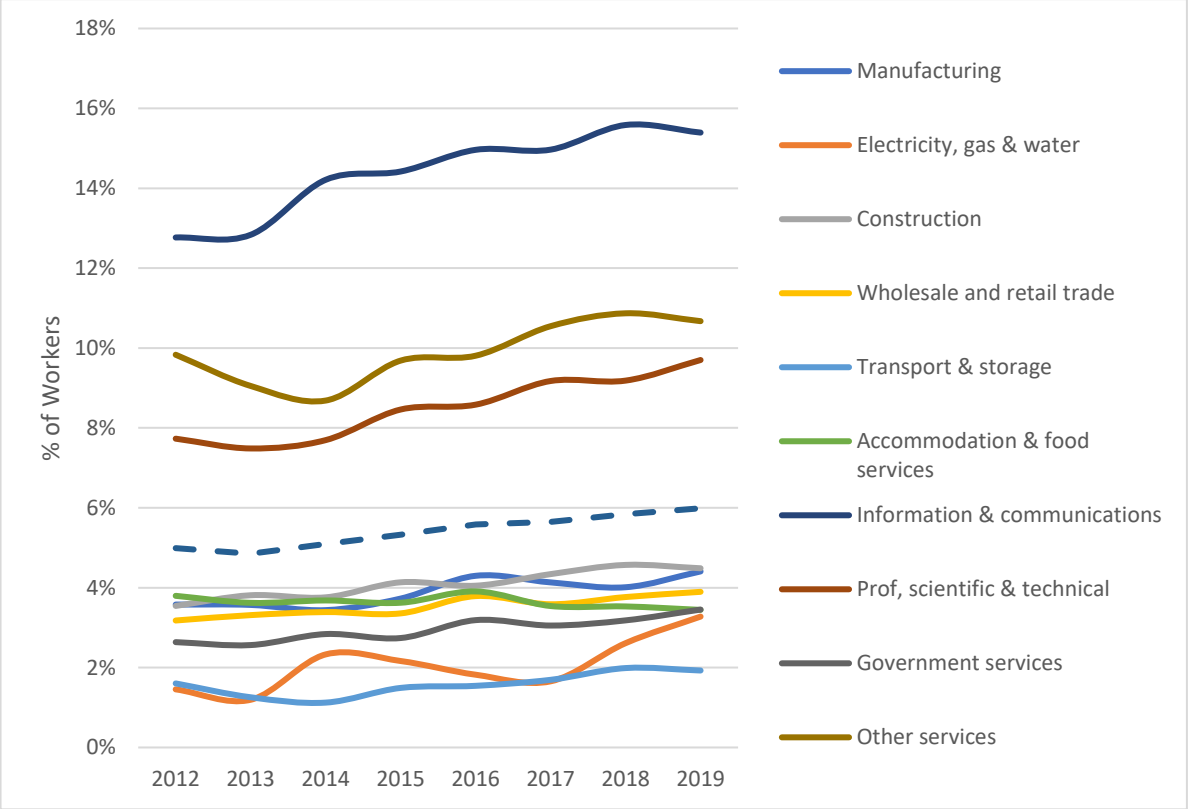
Figure 39. Percentage of UK workforce homeworking by sector, 2019



Source: Source: ONS

9.48 Prior to Covid there was a clear upward trend in the proportion of people working from home. ONS's remote working data at a national level shows that from 2012-19 the scale of homeworking – those who mainly work from home – has increased from 5.0% in 2012 to 6.0% in 2019. This ranges by sector, from 1.9% in Transport and Storage to 15.4% in IT and Communications.

Figure 40. Numbers of Homeworkers by Sector, UK



Source: ONS

9.49 The future changes in working from home rates can be estimated by extrapolating the growth trend in home working from 2012-19 into the future. This is done for each sector and results in a total proportion of home working of 8.7% by 2038 – up from 6.0% in 2019. For some sectors this is notably higher – the highest is IT and Communications which grows to 22.5% by 2038. This suggests that the predominantly office-based sectors will be most impacted, which accords with the analysis above.

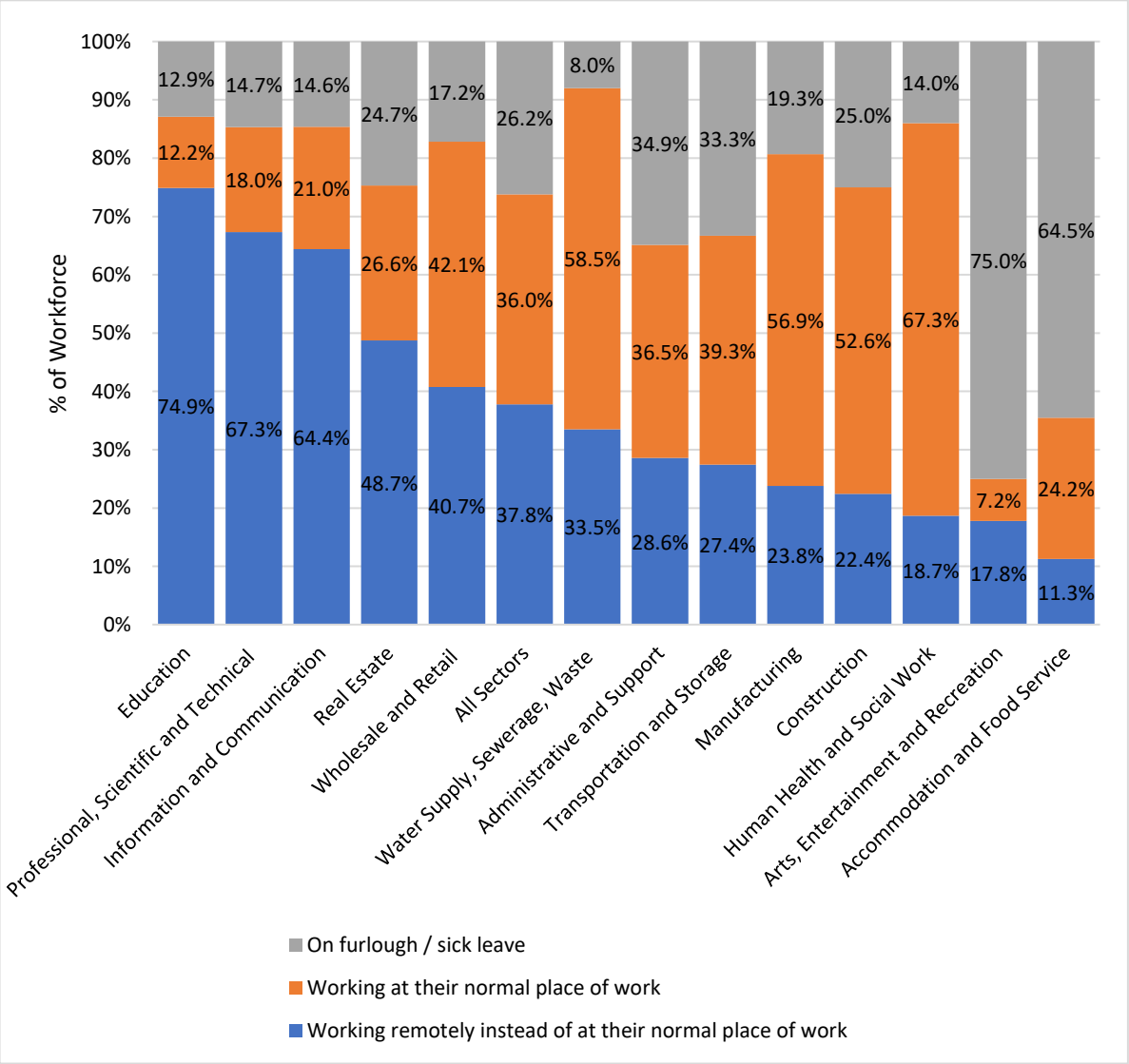
Table 55. Projected Change in Working from Home by Sector, 2019-38

	2019	2038	Change
Manufacturing	4.4%	6.7%	2.3%
Electricity, gas & water	3.3%	8.2%	4.9%
Construction	4.5%	7.0%	2.6%
Wholesale and retail trade	3.9%	5.8%	1.9%
Transport & storage	1.9%	2.8%	0.9%
Accommodation & food services	3.4%	2.5%	-1.0%
Information & communications	15.4%	22.5%	7.1%
Prof, scientific & technical	9.7%	15.0%	5.3%
Government services	3.5%	5.7%	2.2%
Other services	10.7%	13.0%	2.3%
All Jobs	**6.0%**	**8.7%**	**2.7%**

9.50 The lockdown restrictions due to COVID-19 have affected different sectors to different degrees, depending largely on the nature of work and whether it is possible for normal work tasks to be completed whilst working from home. This has driven many companies to update their operating practices and computer hardware/software in order to facilitate longer-term home working. This has no doubt increased the capacity for homeworking for a number of businesses. The lockdown has also necessitated a change in business culture with regards to home working, for example a greater number of business meetings taking place online rather than face to face.

9.51 The Business Impact of Coronavirus (COVID-19) Survey (BICS) data from ONS provides an indication of how this situation has changed since lockdown restrictions came into place. This shows the level of home working achieved for each sector during lockdown.

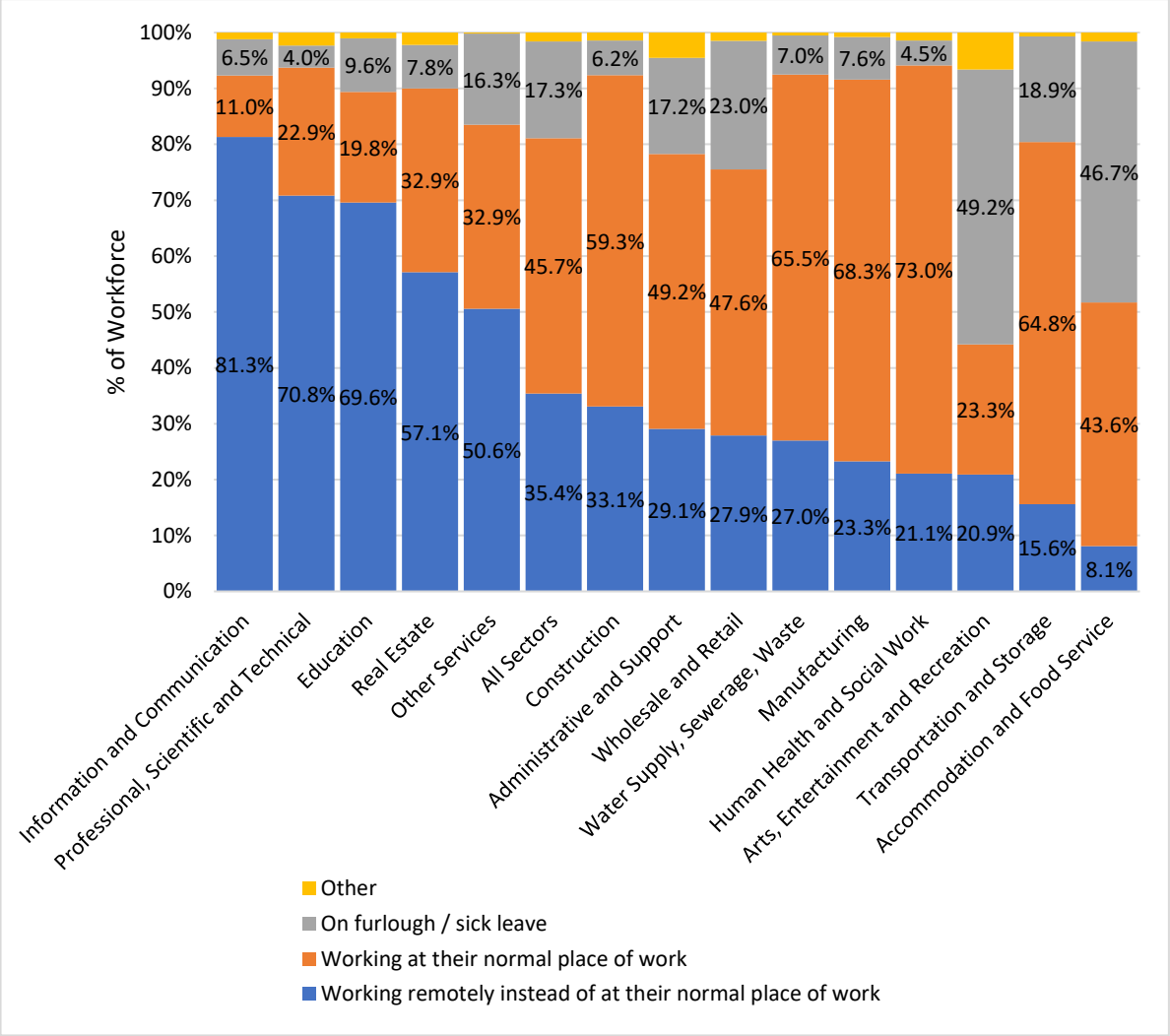
Figure 41. Work location of workforce by sector, June 2020



Source: ONS BICS June 2020

9.52 Figure 42 shows similar data from February 2021. This data is taken from the Business Insights and Impact on the UK Economy dataset produced by ONS which supersedes the BICS. This provides an update to the figures from the remote working figures from summer 2020 and shows a broadly similar level of remote working for the majority of sectors.

Figure 42. Work location of workforce by sector, February 2021



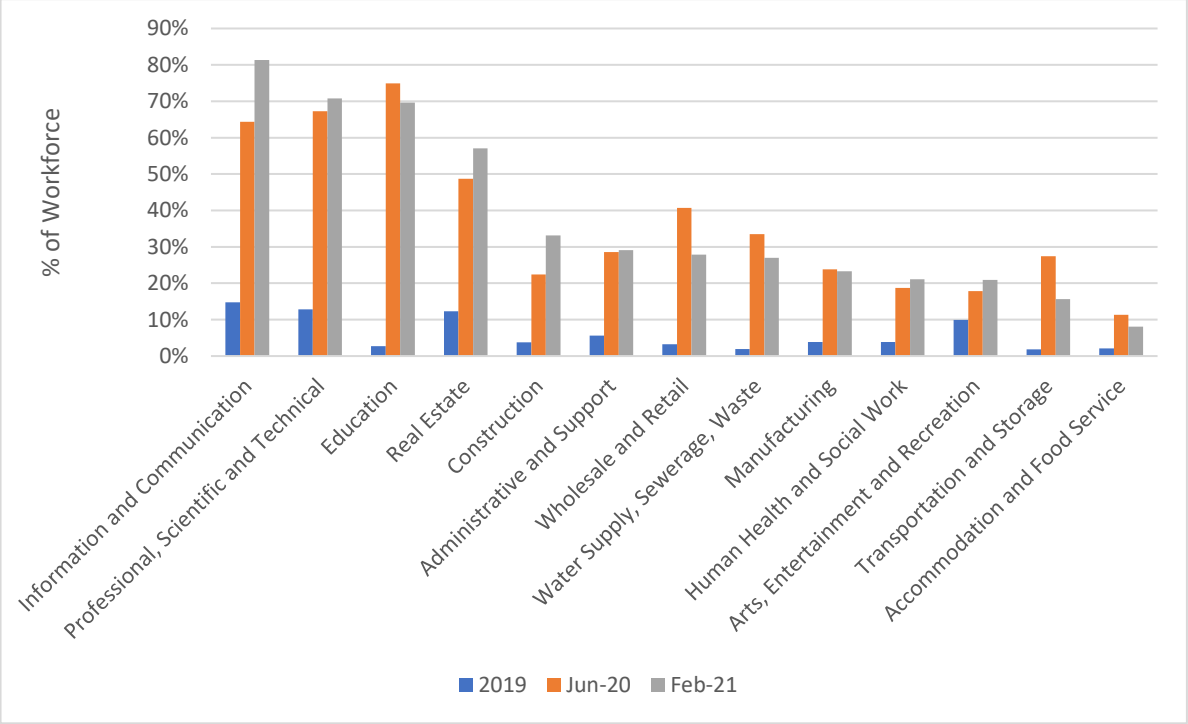
Source: ONS Business insights and impact on the UK economy March 2021

9.53 Figure 43 compares the pre-COVID and post-lockdown remote working figures from summer 2020 and spring 2021. This shows the increase in home working in each sector. It is clear from the data that sectors with high levels of office-based activities have seen particularly high levels of remote working, and large increases from the rates of home working seen pre-lockdown:

- Professional, Scientific and Technical Services increasing from 12.8% to 67.3%;
- Information and Communications increasing from 14.8% to 64.4%; and
- Real Estate from 12.3% to 48.7%.

9.54 The data provides a reasonable estimate for the capacity for home working in each sector. In this sense it provides a reasonable 'upper bound' of the potential for home working in each sector.

Figure 43. Remote working by sector, 2019 vs June 2020 vs February 2021



Source: Source: SPRU analysis of various ONS data

9.55 Whether these are long term changes to working practices remains to be seen. Going forward, as lockdown restrictions are eased, the 'new normal' is unlikely to see a continuation of this level of home working but equally it is unlikely to drop back to pre-COVID levels.

9.56 For some sectors – for example Education, which has seen one of the highest increases – the levels of remote working have been a requirement due to the closure of education establishments. These are very likely to drop significantly towards pre-COVID levels once these establishments are re-opened. Impacts for these will likely to be relatively short-term.

9.57 However, it is clear that the lockdown has required an unprecedented level of home working which has demonstrated that it is a viable option for many and has removed many of the barriers to home working such as technology and corporate culture. A repeated theme of the stakeholder engagement has been that this has resulted in many of the barriers to home working being overcome out of necessity. Three main issues have been identified:

- Technological barriers
- Corporate attitudes towards homeworking and fears about reduced productivity
- Limitations on teamworking, training, and client facing

9.58 Feedback from stakeholders suggests that enforced homeworking has resulted in the first two of these barriers being overcome, at least to some degree. However, the third barrier largely remains. The evidence suggests that this would likely result in increased working from home in the future.

9.59 Some respondents suggested that this could alter their recruitment practices allowing the recruitment of entirely remote workers over a much wider geographical range. However, the majority of businesses suggest that they are simply delaying activities such as recruitment, training, networking and corporate events, until after restrictions are lifted. This suggests that the current level of home working is not sustainable and some return to office working will be necessary in the long-term.

9.60 The table below summarises the current level of working from home for each broad sector, the increase if the pre-COVID growth rate were to continue, and the 'upper limit' of home working achieved during lockdown.

9.61 While it is unlikely that the remote working patterns which have arisen as a result of COVID will pertain long-term, they do demonstrate that the rate of continued growth in the level of home working that was seen pre-Covid is easily achievable. Indeed, in light of the rates of home working seen post-COVID this level of growth in home working appears to be conservative.

9.62 However, the majority of stakeholders interviewed suggest that the levels of remote working for office workers are likely to increase following the pandemic. However, this is more likely to take the form of increased levels of flexible working – i.e. office workers sharing their workdays between home and the office but working an increased number of days from home than pre-pandemic – rather than a significant increase in the number of workers who work exclusively from home.

9.63 Flexible working still requires businesses to retain a considerable quantum of office floorspace, although businesses are exploring how they can rationalise their space usage to minimise wasted space. This will likely lead to a greater proportion of office space being used for hot desking and touch down space.

9.64 Overall, this means the impacts of the changes to remote working will likely be less dramatic than indicated by the peak lockdown figures. This notwithstanding, even the continuation of the pre-covid trend shows a considerable increase in the levels of home working by 2038.

Table 56. Comparison of Working from Home Patterns

	2019 – pre-Covid	2038 – Continuation of pre-Covid Trend	Covid Lockdown Peak
Manufacturing	4.4%	6.7%	23.8%
Electricity, gas & water	3.3%	8.2%	33.5%
Construction	4.5%	7.0%	33.1%
Wholesale and retail trade	3.9%	5.8%	40.7%
Transport & storage	1.9%	2.8%	27.4%
Accommodation & food services	3.4%	2.5%	11.3%
Information & communications	15.4%	22.5%	81.3%
Prof, scientific & technical	9.7%	15.0%	70.8%
Education	3.0%	5.5%	74.9%
Health	4.1%	5.7%	21.1%

f) Stakeholder Views on Covid

9.65 The consensus of the stakeholder interviews was that the Covid pandemic and the associated lockdown restrictions had a considerable impact on Copeland's economy throughout 2020 and the start of 2021.

9.66 There had been considerable job losses and furloughing associated with Covid and the restrictions relating to the lockdown. This has had a particular impact on the leisure, tourism, and hospitality sectors as well as a range of sectors which support these sectors such as the creative arts and services such as printing and other business services. These sectors are very important for Copeland's economy linked strongly to the visitor economy attached to the

National Park.

9.67 However, it is generally considered that the impact that Covid will have on these sectors in Copeland will be short-term and longer-term these sectors will bounce back. The downturn for these sectors is driven by central Government policy restricting the movement of people and it was felt that once this barrier was removed then things would improve. This was evidenced during the periods during 2020 when restrictions were eased, and domestic tourism saw an increase on the previous year. This was true in Copeland where visitor tourism during these periods was up while business tourism was down.

9.68 Conversely, stakeholders reported that business birth rate in Copeland had increased during the past year, in part due to increased levels of redundancies. While this may represent short-term employment solutions for many – resulting in a corresponding increased business death rate, it was reported that there has been a recent increase in demand for small, flexible space for start-up or single occupier businesses since lockdown started.

9.69 Stakeholders felt that the nuclear supply chain sector was less affected by the changing market fluctuations than other sectors. It was felt that this helped insulate the sector from short-term volatility from events such as Covid.

9.70 For office-based sectors, businesses have embraced technological improvements and more readily embraced using remote working opportunities and this has made communications easier. There is more widespread usage of online meeting software meaning arranging virtual meetings has become the norm. Stakeholders have reported that this has made communications and engagement – e.g. between landlord and tenant – much easier to arrange, and there is less time spent travelling between face to face meetings.

9.71 Technological barriers have been overcome. Businesses have been forced to update their operating practices to enable home working including updating their hardware and internal and client facing software. This has benefits not only to enable home working practices to continue longer-term, but also just to update and improve general business function.

9.72 A more positive work culture towards working from home. Many reported that prior to the pandemic there was a mixed attitude among businesses towards remote working. Some were already supportive of the practice however most businesses considered working from home as a practical necessity to ensure a healthy work life balance. Some were fearful of a lack of productivity of staff when working remotely. Stakeholders reported that attitudes to home working have softened following the enforced lockdowns relating to Covid as levels of home working has increased but this has not led to a related downturn in productivity.

9.73 This phenomenon is also most likely linked to improvements in technology and increased usage of remote software such as online meetings and file sharing software as industry standard. This means workers working from home are not disadvantaged by doing so which was not always the case in the past – for example, remote workers dialling in to face to face meetings via phone.

9.74 This has increased the reliance on high-speed internet in order to support higher volumes working from a wider range of locations. While there were some areas of Copeland which were considered to have poor connectivity, this was not considered to be a major problem for homeworking in the Borough.

9.75 Stakeholders were uncertain of what the longer-term impacts of Covid would be. The general consensus is that the enforced working from home has broken down the barriers for home working in office-based sectors meaning remote working will be more practical, accepted, and therefore more widespread than before.

9.76 However, all stakeholders agreed that there would be a ‘return to the office’ in some form, with most businesses likely to take a combined approach to get the benefits of both ways of

working. Most agrees that the majority of businesses will still require an operation base even if most of their workforce works from home the majority of the time.

9.77 This would suggest that many office workers might expect to see increased remote working opportunities than prior to the pandemic and on a more formalised basis. This would likely mean office-based businesses needing a greater level of flexible workspace such as touchdown space, informal meeting space and hotdesking, and less traditional allocated desk space.

9.78 This will likely require office-based occupiers to reassess their floorspace requirements over the coming months and years. In the short-term flexibility will be required to ensure that needs can be met as they emerge.

10.0 FUTURE EMPLOYMENT LAND NEEDS

a) Labour Demand Scenarios

10.1 This section considers the level of employment land needed to support the level of employment growth shown in the econometric forecasts and Growth Scenario. This is one of the approaches to assessing future need – the 'labour demand' approach – as set out in PPG. The labour demand approaches should be considered alongside other approaches and economic and contextual data set out in the other sections of this report.

10.2 The starting point for the labour demand scenarios is the econometric forecasts. These are set out in more detail in Section 7 which concludes that the CE and Experian forecasts provide the most reasonable basis for planning for employment growth in Copeland to 2038. However, the analysis in Section 7 also demonstrated that it was necessary to apply an adjustment to the Manufacturing of basic metals sector which in Copeland relates almost exclusively to employment at the Sellafield Ltd site.

10.3 The employment outputs of each forecast are set out in Tables 57 and 58. Note, the figures in these tables may not sum exactly due to rounding.

Table 57. CE – Total Employment Growth 2021-38

	2021	2038	Change
Agriculture etc	500	500	0
Mining & quarrying	0	0	0
Manufacturing	10,300	9,400	-900
Electricity, gas & water	300	300	0
Construction	2,900	2,900	0
Distribution	3,100	3,200	100
Transport & storage	900	900	0
Accommodation & food services	2,000	2,600	600
Information & communications	200	300	100
Financial & business services	5,300	5,900	600
Government services	8,300	8,900	600
Other services	1,300	1,200	-100
Total	**35,200**	**36,300**	**1,100**

Table 58. Experian – Total Employment Growth 2021-38

	2021	2038	Change
Accommodation & Food Services	2,000	2,400	400
Administrative & Supportive Services	2,100	2,400	300
Agriculture, Forestry & Fishing	600	600	0
Air & Water Transport	0	0	0
Chemicals (manufacture of)	0	0	0
Civil Engineering	400	400	0
Computer & Electronic Products (manufacture of)	0	0	0
Computing & Information Services	0	0	0
Construction of Buildings	1,400	1,400	0
Education	2,000	2,100	100
Extraction & Mining	0	0	0
Finance	0	0	0
Food, Drink & Tobacco (manufacture of)	0	0	0
Fuel Refining	0	0	0
Health	2,800	3,300	500
Insurance & Pensions	0	0	0
Land Transport, Storage & Post	700	800	100
Machinery & Equipment (manufacture of)	0	0	0
Media Activities	0	0	0
Metal Products (manufacture of)	11,600	11,600	0
Non-Metallic Products (manufacture of)	0	0	0
Other Manufacturing	0	0	0
Other Private Services	700	800	100
Pharmaceuticals (manufacture of)	0	0	0
Printing and Recorded Media (manufacture of)	0	0	0
Professional Services	2,700	2,800	100
Public Administration & Defence	1,800	1,900	100
Real Estate	0	0	0
Recreation	600	600	0
Residential Care & Social Work	1,500	1,900	400
Retail	2,200	2,300	100
Specialised Construction Activities	1,200	1,300	100
Telecoms	0	0	0
Textiles & Clothing (manufacture of)	0	0	0
Transport Equipment (manufacture of)	0	0	0
Utilities	300	200	-100
Wholesale	700	700	0
Wood & Paper (manufacture of)	0	0	0
Total	**35,300**	**37,500**	**2,200**

10.4 Five growth scenarios have been developed which consider future policy interventions, initiatives, and pipeline projects which could see future economic growth in Copeland deviate away from the baseline forecasts. The scenarios considered are:

a) Sellafield Off-Siting – Sellafield is currently undergoing a process of rationalising its operational activity on site and relocating existing on-site workers to alternative locations. This will not impact on the number of workers, but will impact on the

demand for employment land in the borough beyond the Sellafield site.

b) Increased capture of Sellafield's supply chain – a number of Council and LEP initiatives are aimed at increasing the level of jobs within Sellafield's supply chain which are retained within Copeland. This scenario considers the impact these might have on job growth and employment land needs.

c) Cumbria Clean Energy Park – considering the employment impacts of the development of an energy hub around the Moorside site. This primarily focusses on the direct and indirect jobs arising during the construction phase.

d) Woodhouse Colliery – considering the employment impacts of the development of a new coal mine. Considers the direct and indirect jobs during the construction and operational phases.

e) North Shore development – this development is tied into the growth of a number of initiatives focussed around the development of a big data campus and/or AI cluster which could see growth beyond that seen historically in Copeland.

10.5 A detailed sectoral analysis of the forecasts and adjustment made to create the Growth Scenarios are set out in Section 8.

10.6 The growth scenarios have been developed in order to assess the potential impacts and implications of these potential future developments on economic growth in Copeland and therefore allow the Council to reasonably plan for potential future employment land needs, depending on which (if any) of these scenarios were to proceed.

10.7 Table 59 sets out the growth in total employment showed in the Growth Scenario.

Table 59. Employment Growth by Sector – Growth Scenarios 2021-38

Sector	Employment Growth 2021-38
Administrative & Supportive Services	1,090
Civil Engineering	183
Computer & Electronic Products (manufacture of)	96
Computing & Information Services	103
Construction of Buildings	818
Extraction & Mining	500
Land Transport, Storage & Post	147
Machinery & Equipment (manufacture of)	219
Metal Products (manufacture of)*	-1,364
Professional Services	1,609
Public Administration & Defence	816
Specialised Construction Activities	701
Wholesale	7
Total	**4,923**

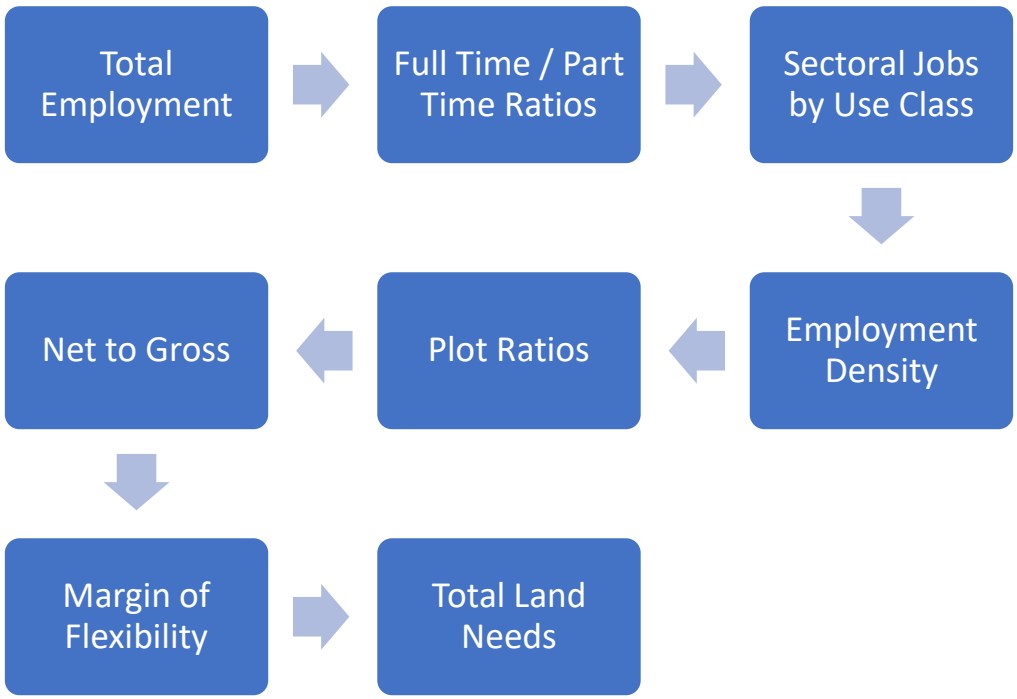
*Denoting jobs at the Sellafield site

b) Labour Demand Modelling

10.8 The approach to modelling the labour demand scenarios is set out in the flow chart below. The starting point for each scenario is the total net growth in employment in each sector

shown in each forecast. Other than these differing inputs the modelling assumptions made are consistent for each scenario.

Figure 44. Approach to Employment Land Needs Modelling



10.9 The modelling assumptions for each stage of the process are set out in the table below.

Table 60. Labour Demand Modelling Assumptions

#	Stage	Description
i	Full Time Equivalent Jobs	Full time equivalent (FTE) jobs has been calculated for each sector based on the ratio of full-time and part-time employment jobs for each sector using data for Copeland from BRES.
ii	Changing Trends in Working from Home	A key factor arising from the stakeholder engagement is that the number of people working from home is expected to increase. The lockdown following the outbreak of COVID-19 has enforced many more people to work from home. The lockdown rate of homeworking is not expected to continue in the long-term, and levels are expected to drop as social distancing measures are reduced. However, the pre-Covid trend showed increasing prevalence of home working even prior to the pandemic.
iii	Sectoral Jobs by Use Class	The proportion of jobs in each sector is disaggregated by the type of employment (B Class)[12] use class and non-employment use classes. The use classes are: • B1a – office

[12] It is noted that B1 uses now come under the new Class E. However, the modelling takes account of the employment densities set out in the HCA Employment Densities Guide 3rd Edition which provides figures in terms of the B Class sectors.

#	Stage	Description
		• B1b – Research and development office • B1c – Light Industrial • B2 – General Industrial • B8 – Distribution • Other (any jobs not requiring B Class space) The use class proportions for each sector are based on detailed (SIC4 sub-sectors) BRES data for each sector in Copeland's economy. Each SIC4 sub-sector has been allocated a use class, and this is used to calculate the proportional jobs in each sector by use class, where the proportions of each sector reflect the proportions of jobs in each SIC4 sub-sector.

iv	Employment Density	This reflects the quantum of floorspace required for each job. This is informed by the Employment Density Guide 3rd Edition (HCA, 2015). The following employment densities are used:
		• B1a office:
		  ○ Corporate: 13 sqm/job
		  ○ Technology / Media / Telecoms: 11 sqm/job
		  ○ Professional services: 12 sqm/job
		  ○ Public services: 12sqm/job
		• B1b Research and Development: 50 sqm/job
		• B1c Light Industrial: 47 sqm/job
		• B2 general industrial: 36 sqm/job
		• B8 distribution: 70 sqm/job
		These employment densities reflect fairly average densities for each use class as there was no evidence arising from the commercial market assessment to suggest any alternative assumptions. The B8 employment density assumption is on the lower end of the range provided reflecting the nature of the market in Copeland.
		The employment densities have then been adjusted in line with benchmarks in the guidance so that they all relate to gross external area (GEA). The employment densities for B1 are quoted as net internal area (NIA) and have been converted to GEA based on a conversion of 20% for B1a office and 10% for B1b and B1c. The employment densities for B2 are quoted for gross internal area (GIA) and have been converted to GEA based on a conversion of 5%. The employment densities for B8 are quoted as GEA.

v	Plot Ratios	The next stage is to convert floorspace requirements to land requirements. A plot ratio of 40% has been assumed for all use classes. This is based on the assumption that the majority of the

#	Stage	Description
		new office space will be delivered at either out of town locations or otherwise lower density urban sites. While it is acknowledged that Whitehaven Town Centre has potential for higher density development, this assumption reflects that the majority of office development will not be of this type. It assumes an average plot ratio for industrial uses, and for distribution uses representing a relative lack of very large national scale distribution centres.
vi	Net to Gross	The econometric forecasts all provide jobs growth on a net basis – i.e. they include for sectors which will see growth and sectors which will see decline. This means figures up to this point are net. The next stage is to convert this to gross development needs. This is done by accounting for the quantum of losses of existing stock which will be expected to be lost over the forecasting period. This is estimated based on past trends of employment land lost to other uses in Copeland annualised and then forecast forward over the forecasting period.
vii	Margin of Flexibility	For the final stage we have added a margin of flexibility. This reflects the following factors: • To allow greater flexibility to support changing business needs; • To provide a choice of sites to facilitate competition in the property market; • To provide flexibility to allow for any delays in individual sites coming forward; • The potential error margin associated with the forecasting process. The size of the margin of flexibility depends on the location and local drivers of demand. Generally, a margin of between 2 and 5 years' worth of completions is usually considered reasonable. One of the key findings of the stakeholder engagement is that a high level of flexibility of supply is required in order to be in a position to respond to emerging needs of both indigenous businesses and to continue to attract inward investment opportunities. Accordingly, we have calculated the margin of flexibility based on 5 years' worth of completions.
ix	Total Land Needs	Outputs are provided in terms of hectares required for each type of employment use. The use classes have been combined in terms of B1a/b office, B1c/B2 industrial, and B8 distribution. This is in order to provide an indication of demand for each type of use. However, it is recommended the Council are flexible with regard to allocating land for specific types of (B Class) employment use

#	Stage	Description
		at the detriment to other types of employment uses.

10.10 The starting point for the labour demand modelling is the jobs growth forecasts. A worked example of this process is set out below based on the CE forecast[13]. The scenarios based on the other forecasts take the same approach and use the same modelling assumptions. The CE and Experian forecasts provide slightly different sectoral breakdowns and so the model has been calibrated, where necessary, to support each forecast by dividing sectors on a proportional basis, thereby ensuring consistency in modelling between scenarios.

i) *Full Time Equivalent (FTE) jobs*

10.11 The first stage is to calculate the FTE jobs. This is calculated individually for each sector in each forecast.

Table 61. CE – FTE Jobs Growth 2021-38

	FTE %	FTE Growth 2021-38
Agriculture etc	96%	0
Mining & quarrying	100%	0
Manufacturing	97%	-900
Electricity, gas & water	97%	0
Construction	96%	0
Distribution	78%	100
Transport & storage	86%	0
Accommodation & food services	73%	400
Information & communications	95%	100
Financial & business services	93%	600
Government services	78%	500
Other services	79%	-100
Total	**89%**	**700**

ii) *Changing Trends in Working from Home*

10.12 As set out in Section 9, one of the key issues arising from the stakeholder engagement was the impacts of COVID-19 and the subsequent lockdown restrictions has been the numbers of people working from home. A repeated theme of the stakeholder engagement has been that this has resulted in many of the barriers to home working being overcome out of necessity.

10.13 The removal of these barriers suggests that the prevalence of remote working is likely to increase in future. However, the scale of growth is currently unclear. Lockdown restrictions remain widespread meaning the current level of remote working is unlikely to be sustained. Conversely, a continuation of pre-COVID levels also seems unlikely.

10.14 Remote working is traditionally factored into employment land modelling implicitly via the employment densities from the HCA Employment Densities Guide (2015). These figures consider the average amount of floorspace required per worker for different uses. It factors levels of remote working – such as hotdesking and agile working – into the employment

[13] The CE forecast has been chosen as a worked example due to it disaggregating outputs across a smaller number of sectors making than the Experian forecast, and thus making the findings easier to present.

density ratios.

10.15 There are a number of barriers to home working. Three main issues have been identified:

- Technological barriers
- Corporate attitudes towards homeworking and fears about reduced productivity
- Limitations on teamworking, training, and client facing

10.16 These barriers have meant that the growth in the proportion of workers mainly working from home is relatively small and growth has been relatively slow. It also raises significant questions about the scale of future growth in the rates of homeworking, and none of the recognised forecasting houses produce forecasts of how this might increase in future.

10.17 Feedback from stakeholders suggests that enforced homeworking due to COVID-19 has resulted in the first two of these barriers being overcome, at least to some degree. However, the third barrier largely remains. This suggests that this would likely result in increased working from home in the future, but this differs greatly between different sectors.

10.18 We have therefore considered how the working from home trends are likely to change from 2015 onwards over the plan period. This has been done using national data on home working from ONS for the period 2012-19. This has been extrapolated forward to 2038 (see section 9 for details). This is done for each sector and results in a total proportion of home working of 8.7% by 2038 although for some (predominantly office-based) sectors this is higher – the highest is IT and Communications which grows to 22.5% by 2038. Using 2015 as a base-date – as this aligns with the latest HCA employment densities data – we have calculated the increase in the proportion of homeworking for each year to 2038.

Table 62. Percentage Working from Home per Sector[14]

	2015	2038
Manufacturing	3.7%	6.7%
Electricity, gas, air cond supply	1.9%	13.2%
Water supply, sewerage, waste	2.4%	4.2%
Construction	4.1%	7.0%
Wholesale, retail, repair of vehicles	3.4%	5.8%
Transport and storage	1.5%	2.8%
Accommodation and food services	3.6%	2.5%
Information and communication	14.4%	22.5%
Financial and insurance activities	4.3%	12.5%
Real estate activities	14.7%	15.2%
Prof, scientific, technical activ.	12.0%	17.4%
Admin and support services	5.2%	10.0%
Public admin and defence	1.8%	5.9%
Education	2.3%	5.5%
Health and social work	3.6%	5.7%
Arts, entertainment and recreation	10.6%	12.4%
Other service activities	8.8%	13.5%
Total	**5.3%**	**8.7%**

Source: Source: Derived from ONS data

[14] The data for the Agriculture, forestry and fishing and Mining and quarrying sectors has been omitted due to unreliable outputs based on the small sizes of these sectors. This does not affect the employment land requirement figures for Copeland.

10.19 The increase in homeworking for each sector is then factored into the employment land modelling for Copeland. This identifies the number of jobs growth in each sector by 2038 which will not require additional floorspace. (This only accounts for the growth since 2015 so the implicit homeworking assumptions in the HCA employment densities remain in the modelling). The additional homeworkers are assumed not to require additional floorspace and so are discounted from the analysis from this stage onward. The changes in working from home rates applies to all jobs in Copeland, not just the additional jobs shown in the forecasts.

iii) ***Sectoral Jobs by Use Class***

10.20 This estimates the number of jobs which will require each type of B Class premises and other (non-B Class) space. This is based on estimates of the current breakdown of jobs for each sector using detailed analysis of BRES data. The jobs growth for each type of employment uses is shown in the table below:

Table 63. CE – Jobs Growth by Use Class 2021-38

	B1a/b	B1c/B2	B8	Non B Class
Agriculture etc	-	-	-	100
Mining & quarrying	-	-	-	-
Manufacturing	-	-1,000	-	-
Electricity, gas & water	-	-	-	-
Construction	-	-	-	-
Distribution	-	-	-	-
Transport & storage	-	-	-	-
Accommodation & food services	-	-	-	400
Information & communications	100	-	-	-
Financial & business services	200	-	-	-
Government services	100	-	-	300
Other services	-	-	-	-100
Total	**300**	**-1,000**	**-**	**800**

iv) *Employment Density*

10.21 Applying the average employment densities results in the floorspace requirement for each type of B Class use. The floorspace (sqm) is shown in the table below:

Table 64. CE – Floorspace (sqm) by Use Class 2021-38

	B1a/b	B1c/B2	B8	Total
Agriculture etc	-	-	-	-
Mining & quarrying	-	-	-	-
Manufacturing	-	-44,100	-	-44,100
Electricity, gas & water	-	-100	-	-100
Construction	-	-500	-800	-1,300
Distribution	-	-	300	300
Transport & storage	-	-	600	600
Accommodation & food services	-	-	-	-
Information & communications	700	-	-	700
Financial & business services	3,200	1,200	1,100	5,500
Government services	1,000	-	-	1,000
Other services	-400	-400	-	-800
Total	**4,500**	**-43,800**	**1,100**	**-38,200**

v) *Plot Ratios*

10.22 The plot ratios allow an estimation of the land required to accommodate the identified quantum of floorspace identified above. This is the net employment land required to support the level of additional jobs growth shown in the econometric forecasts.

10.23 The table below shows the net employment requirement for the CE and Experian forecasts (with adjustments to manufacturing). The CE forecast shows an overall requirement for a significant loss of industrial (B1c/B2) floorspace, reflecting the employment and floorspace figures derived from the CE forecast set out in the tables above. This results in an overall negative net requirement solely to meet the future jobs growth in the CE forecast.

10.24 The Experian forecast does not show this same significant level of losses of industrial jobs but neither does it require significant employment land to support future jobs growth in the forecast. This results in a very modest overall net requirement of 1 ha solely to meet the future jobs growth in the Experian forecast.

Table 65. Net Employment Land Needs (ha), 2021-38

	B1a/b	B1c/B2	B8	Total
CE	1.1	-11.0	0.3	-9.6
Experian	0.2	0.1	0.7	1.0

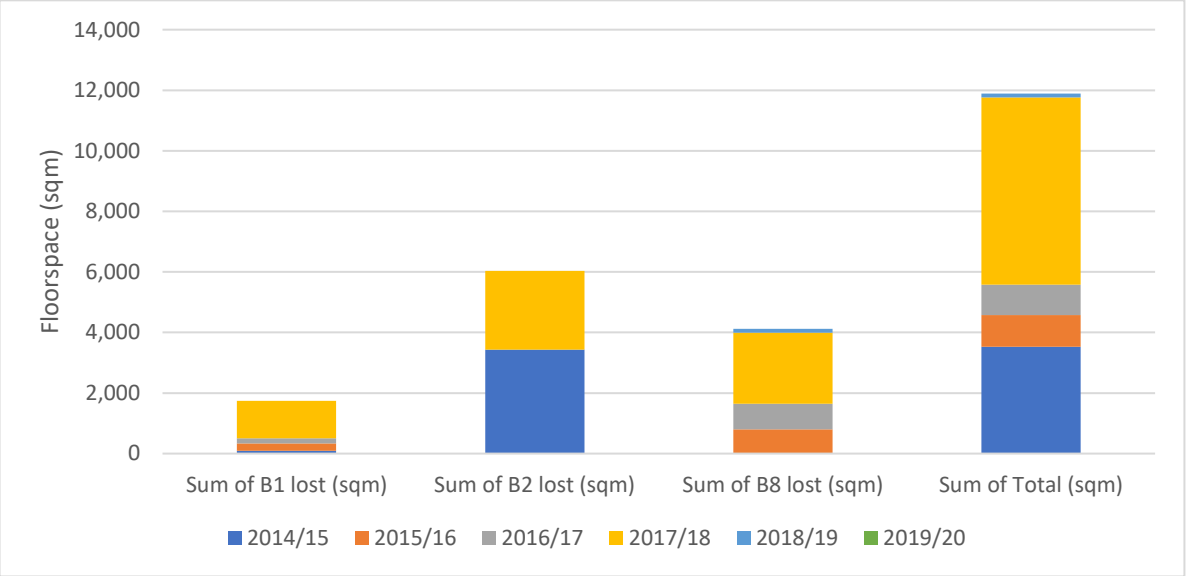
vi) *Net to Gross Needs*

10.25 The figures in the table above show the net need for employment land to support the levels of jobs growth in the forecasts. In addition to this, there will also be an employment land requirement arising from the need to update and replace existing stock. This is calculated by looking at the trend of losses of B Class employment land to alternative (non-B Class) uses and using this to forecast expected future losses of employment land.

10.26 The figure below shows the net losses of employment land in Copeland since 2014/15. This shows in total almost 11,900 sqm of B Class floorspace has been lost over this period – equivalent to 1,980 sqm per annum.

10.27 Assuming this level of losses continues over the plan period would mean that a further 33,677 sqm of employment land will be lost. It is important that this is adequately reprovisioned or else there will not be sufficient employment land to support the net growth in jobs over the plan period.

Figure 45. Employment Floorspace Losses – 2014-2020



Source: SPRU analysis of local authority data

10.28 The net losses data has been annualised and then multiplied by 17 to identify the replacement demand required for the forecasting period. This is then converted to land requirement using the plot ratios used in the main labour demand modelling. This replacement demand is then added to the net requirement in order to estimate gross needs.

Table 66. Replacement Demand (ha), 2021-38

	B1a/b	B1c/B2	B8	Total
Replacement Demand	1.2	4.3	2.9	8.4

vii) *Flexibility Margin*

10.29 The margin of flexibility has been considered based on a number of years' worth of completions for each authority. It is typical to add between 2-5 years' worth of completions as a margin. Engagement with the commercial property market has identified that flexibility of supply is key in Copeland so that sufficient quantum and range of sites are available to support business growth and inward investment opportunities. Therefore, we have included a margin of flexibility equivalent to 5 years' worth of completions data.

Table 67. Flexibility Margin (ha), 2021-38

	B1a/b	B1c/B2	B8	Total
Margin	1.2	0.8	0.5	2.6

viii) *Total Employment Land Needs*

10.30 Taking the sum of the net employment land needs, the net to gross demand, and the flexibility margin identifies the total employment land requirement for each authority for the range of labour demand scenarios.

10.31 The tables below show the outputs of the labour demand scenarios, which show the total employment requirement for Copeland for the period 2021-38 based on the CE forecast as being 1.5 ha, while the total employment requirement based on the Experian forecast is 12 ha.

10.32 The outputs of the labour demand scenarios are assessed against the completions trend forecast as well as wider economic and commercial market factors (Section 6), economic baseline (Section 5), and risks of Brexit and COVID-19 (Section 9) in order to inform the overall conclusions on employment land needs for Copeland. The figures in the tables below should be considered within this context.

Table 68. Total Employment Land Needs (ha) – CE, 2021-38

Stage	Description	B1a/b	B1c/B2	B8	Total
i-v	Net Growth Needs	1.1	-11.0	0.3	-9.6
vi	Net to Gross	1.2	4.3	2.9	8.4
vii	Margin of Flexibility	1.2	0.8	0.5	2.6
viii	**Total**	**3.6**	**-5.9**	**3.7**	**1.5**

Table 69. Total Employment Land Needs (ha) – Experian, 2021-38

Stage	Description	B1a/b	B1c/B2	B8	Total
i-v	Net Growth Needs	0.2	0.1	0.7	1.0
vi	Net to Gross	1.2	4.3	2.9	8.4
vii	Margin of Flexibility	1.2	0.8	0.5	2.6
viii	**Total**	**2.7**	**5.2**	**4.1**	**12.0**

10.33 The tables above show the employment land requirements arising from the econometric forecasts from CE and Experian – also called the labour demand approach. In determining the conclusions for the overall employment land needs for Copeland, these figures should be considered alongside the forecasts based on past completions set out in Section 6 as well as the range of qualitative and quantitative data regarding economic growth trends and local commercial market drivers set out throughout the previous sections of this report.

10.34 This process of assessment and conclusions on the overall employment land requirements for Copeland to 2038 is set out in the following Section 11.

c) Growth Scenarios

10.35 Five Growth Scenarios have been developed which consider the following developments:

- Sellafield Off-Siting
- Increased capture of Sellafield's supply chain
- Cumbria Clean Energy Park
- Woodhouse Colliery
- Big Data / AI Campus

10.36 The employment land requirements for each of these elements has been calculated in accordance with the process above. This provides employment land figures which would be over and above the land requirements shown in the baseline forecasts, should these developments come forward within the plan period.

10.37 In calculating the employment land requirements for the Growth Scenarios, the direct jobs – i.e. the jobs which will be supported at the Woodhouse Colliery site itself – have been excluded from the calculations as there is no need to provide additional land for these jobs. The employment land requirement figures estimate the additional employment land which would be required in Copeland to support wider supply chain, services, and business growth associated with the developments.

10.38 For the Clean Energy Park the employment figures are expected to peak during the construction phase in 2035. Therefore requirement figures for this are given for 2021-35 representing the greatest requirement.

Table 70. Total Employment Land Needs for Growth Scenarios (ha) 2021-38

	B1a/b	B1c/B2	B8	Total
Sellafield Off-Siting	3.2	1.9	0.1	5.2
Sellafield Supply Chain	2.5	3.2	5.3	11.0
Clean Energy Park*	0.9	3.7	2.9	7.5
Woodhouse Colliery	0.3	1.3	1.3	2.8
AI Campus	0.9	0.4	0.1	1.4
Growth Scenario Total	**7.8**	**10.5**	**9.7**	**27.9**

*Requirement for 2021-35

10.39 The requirement figures in the table above should be considered as additive to each other as well as to Copeland's baseline requirement identified in the CE and Experian forecasts. This means, for example, taking the Experian forecast as a baseline and assuming all elements of the Growth Scenario come forward within the Plan period would result in an employment land requirement of 39.9 ha.

d) Summary

10.40 This section considers the level of employment land needed to support the level of employment growth shown in the CE and Experian forecasts and the range of Growth Scenarios. The starting point for each scenario is the total net growth in employment in each sector shown in each forecast. A series of stages are then taken in order to estimate the quantum of floorspace required to support the scale of economic growth shown in the forecasts:

- The first step is to estimate the full time equivalent (FTE) jobs related to the total jobs growth. This is calculated for each sector based on the ratio of full-time and part-time employment jobs.
- The next step is to disaggregate the proportion of jobs growth in each sector by the type of employment (B Class) use class and non-employment use classes. This is based on the existing mix of jobs in each sector in Copeland.
- This is translated into floorspace by assessing the quantum of floorspace required for each job using employment densities.
- The next stage is to convert floorspace requirements to land requirements using a plot ratio, which is the ratio of the size of land required to support the identified quantum of floorspace.

- The next stage is to convert this to gross development needs. This is done by accounting for the quantum of losses of existing stock which will be expected to be lost over the forecasting period.
- Account is made of changing trends in working from home which is based on forecast increases in the number of people working from home in each sector.
- The final stage is adding a margin of flexibility to support changing business needs.

10.41 Outputs are provided in terms of hectares required for each type of employment use. The use classes have been combined in terms of B1a/b office, B1c/B2 industrial, and B8 distribution. This is in order to provide an indication of demand for each type of use. However, it is recommended the Council are flexible with regard to allocating land for specific types of (B Class) employment use at the detriment to other types of employment uses.

10.42 This process identifies a range of employment land needs figures for Copeland for the period 2021-38. The CE forecast shows a need for around 1.5ha while the Experian forecast shows a need for around 12 ha of employment land. These forecasts are considered alongside the past completion trend forecast and wider contextual economic and market data in the following section.

10.43 The Growth scenario provides a range of employment land needs but should all five elements come forward within the Plan period this would require a further 27.9 ha of employment land over and above the requirement identified in the CE or Experian forecasts.

11.0 CONCLUSIONS

11.1 This EDNA report has considered a range of methods to considering future economic growth and employment land needs. Two main forecasting approaches have been considered:

- The labour demand approach based on the growth in future jobs shown in the econometric forecasts from CE, OE, and Experian. Analysis of these forecasts suggests that the CE and Experian forecasts provide the most reasonable basis for estimating future jobs growth providing an adjustment was made to account for job losses in the manufacturing sector which does not look reasonable given the prevalence of jobs in the sector at the Sellafield Ltd site.
- An alternative approach has been considered based on the trend of past completions data of employment uses in Copeland since 2014 as recorded by the Council.

11.2 In accordance with the PPG the EDNA has also assessed a wide range of economic, commercial market, and stakeholder data in order to inform the overall conclusions on employment land needs for Copeland. This includes the completions trend forecast as well as wider and local commercial market dynamics; a range of economic indicators; sectoral risks due to Brexit; the implications of Covid-19 and changing working patterns. The figures in the tables below should be considered within this context.

11.3 The table below shows the employment land needs for Copeland based on the growth in future jobs shown in the econometric forecasts from CE and Experian (the labour demand approach). This shows a need for 1.5 ha and 12 ha of employment land respectively.

Table 71. Total Employment Land Needs (ha) – Labour Demand Forecasts, 2021-38

	B1a/b	B1c/B2	B8	Total
CE	3.6	-5.9	3.7	1.5
Experian	2.7	5.2	4.1	12.0

11.4 In addition, an alternative approach has been considered based on past completion trends. The employment land requirement based on the past completions trend identified a total of 9.39 ha of employment land over the period 2021-38: 4.49 ha for office uses, 2.93 ha of B1c/B2 industrial uses, and 1.97 ha of B8 warehouse/distribution uses.

Table 72. Total Employment Land Needs (ha) – Past Completions Trend, 2021-38

	B1a/b	B1c/B2	B8	Total
Past Completions	4.49	2.93	1.97	9.39

11.5 The land requirement based on the past completions trend shows a total requirement for 9.39 ha of employment land by 2038 – a total which is more aligned with the Experian forecast than the CE forecast. However, the past completions trend shows a need for around 4.5 ha for office space, which is roughly half of the total identified need. Conversely it shows a need for around 2 ha of B8 warehouse/distribution space which is less than shown in either of the labour demand forecasts.

11.6 It is important to note the differences between the forecasting approaches. The past completions trend forecast is derived very simply from past completions and reflects the market conditions from the period from which they are drawn. This is predominantly pre-Covid. More recent commercial market analysis and qualitative feedback from the

stakeholder engagement suggests that the pandemic and related lockdowns have resulted in increased demand for warehouse and distribution uses and increased levels of homeworking particularly for office-based sectors. These trends will not be reflected within the past-trends forecast.

11.7 Conversely, these issues have been factored into the labour demand forecasts – both in terms of the econometric forecasts themselves which all have a base date from early 2021 – and also in terms of the wider quantitative and qualitative assessment of current commercial market dynamics in Copeland and how these are expected to change in future, which have fed into the modelling process set out earlier in this Section. Therefore the labour demand forecasts can be considered to take account of these more up to date issues.

11.8 This notwithstanding, the past completions forecast provides a useful comparator with which to consider the labour demand forecasts. Essentially, this demonstrates that planning for the level of growth indicated in the CE forecast (1.5 ha) would result in a considerable reduction in the rate of growth seen in Copeland in the recent past. Furthermore, this would include the assumption that around 6 ha of existing industrial land could be redeveloped to support the development of other employment uses, however the evidence suggests that this would be unlikely to be the case.

11.9 Conversely, planning for the level of growth shown in the Experian forecast (12.0 ha) would result in a modest increase in the of the overall level of growth seen in Copeland in the recent past, with a greater focus on the delivery of industrial and warehouse/distribution uses and less on office space. This is commensurate with the findings of the wider commercial market assessment as set out in Section 6.

11.10 In conclusion, the analysis suggests that the employment land requirement identified by the Experian forecast (with adjustment made to manufacturing sector) provides the most reasonable estimate for future employment land requirements in Copeland. **This identifies a need for 12 ha of employment land over the period 2021 to 2038.**

11.11 Five Growth Scenarios have been developed which consider pipeline projects which may come forward within the Plan period. Estimates of the employment land which is likely to be required for each project have been provided. As some of the projects have considerable uncertainty attached these elements have been considered independently are therefore additive.

Table 73. Total Employment Land Needs for Growth Scenarios (ha) 2021-38

	B1a/b	B1c/B2	B8	Total
Sellafield Off-Siting	3.2	1.9	0.1	5.2
Sellafield Supply Chain	2.5	3.2	5.3	11.0
Clean Energy Park*	0.9	3.7	2.9	7.5
Woodhouse Colliery	0.3	1.3	1.3	2.8
AI Campus	0.9	0.4	0.1	1.4
Growth Scenario Total	**7.8**	**10.5**	**9.7**	**27.9**

*Requirement for 2021-35

11.12 The Growth Scenario provides a range of employment land requirements, but should all five elements come forward within the Plan period this would require a further 27.9 ha of employment land over and above the requirement identified in the CE or Experian forecasts.

11.13 The assessment of the Growth Scenario is in no way prejudicial to any of these pipeline projects coming forward within the Plan period or at all.

11.14 The pipeline growth projects may in turn stimulate further demand for additional employment land through business growth and new entrants into the borough. These effects could be considered in a future review of this EDNA.

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