East Riding of Yorkshire Council

Employment Land Review: Demand Update

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1 Introduction

1.1 Background

Ove Arup and Partners Limited (Arup) and Edge Economics Limited have been commissioned by East Riding of Yorkshire Council (ERYC) to prepare a partial update to the Employment Land Review (ELR) which was prepared in October 2019-February 2020. The update relates to the provision of new baseline and higher growth scenarios based on the latest available econometric modelling forecasts.

The primary objective of this update is to recognise the implications of significant change that have characterised the period since the ELR was undertaken.

There have been two significant shocks to the UK economy, the implementation of Brexit and the Covid-19 Pandemic. Economic prospects remain highly uncertain. Policy approaches at the national, regional and local level are being reviewed and altered, and new opportunities and threats need to be considered.

Accordingly, this update seeks to ensure that the Local Plan is informed by the latest available evidence in relation to the future requirements for employment land in East Riding.

1.2 ELR 2019/20

This ELR 2019/20 was substantively prepared in the period between October 2019 and February 2020. The underpinning assumptions of the Oxford Economics model informing the econometric forecasts it uses were locked on 21st October 2019. Consultation with key stakeholders took place before the end of January 2020. The review was therefore completed prior to the economic downturn resulting from the Covid-19 Pandemic.

The ELR 2019/20 used the employment growth scenarios from an October 2019 forecast based on the Oxford Econometrics Forecasting Model. The assumptions of this forecast were that the UK would formally depart from the European Union in early 2020 following a Conservative victory in the general election. There was an assumed transition period during which trade agreements remain unchanged but with a level of market uncertainty.

1.3 ELR Update 2022

This ELR Update 2022 was prepared in March/April 2022. It provides a full update of Section 3 of the ELR 2019/20 ('Future Requirements for Employment Land'), including new baseline and higher growth scenarios based on the January 2022 Oxford Economics modelling release. The period considered is 2020-2039.

The update should be treated as a replacement to Section 3 of the ELR 2019/20.

2 Future Requirements for Employment Land

2.1 Overview

This section has been prepared by Edge Economics Limited and assesses the total requirement for additional employment space in the East Riding in the period to 2039. The assessment considers demand across industrial sectors making up the economy and the implications in terms of the types of B-class use space required.

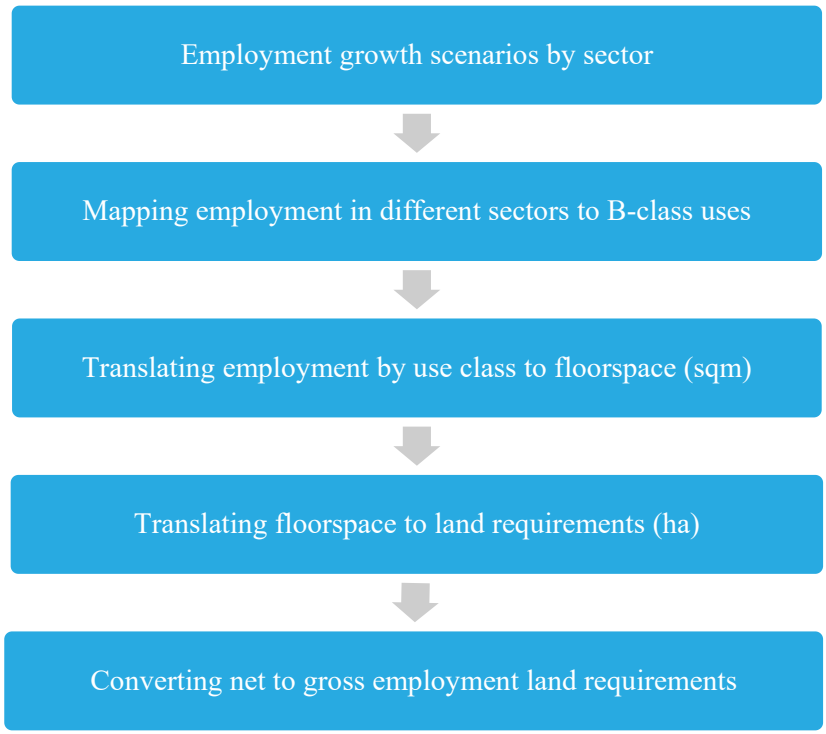
It is noted that there have recently been changes to the use class order that mean that B1 now forms part of the broad E Town Centre use class. The implications of this change for future office space demand are outlined in Section 2.14.

2.2 Approach

The following diagram illustrates the key stages of the approach to estimating the future requirement for employment space.

This process requires a number of assumptions in order to convert forecasts of growth in jobs across different industrial sectors to employment floorspace and land requirements. These are outlined in following sub-sections in Figure 9.

Figure 1: Approach to assessing land requirements[1]



[1] Source: Edge (2022).

2.3 Employment growth scenarios

2.3.1 Overview

The ELR adopts a scenario-based approach to employment growth. This responds to the need for the ELR to plan sufficiently for growth and take into account the potential range of employment growth that could occur.

There are broadly three main forecasting techniques that can be used to forecast employment land requirements. These are:

- **Labour demand forecasts** – based on an economic model, these predict changes in employment by sector;
- **Labour supply forecasts** – these take demographic dynamics as the driver and forecast changes in employment; and
- **Projections of past take-up** – these roll forward trends in past take-up of employment land and floorspace.

There are advantages and disadvantages associated with each:

- Labour demand forecasts can be useful in understanding expected future changes in the scale and sectoral composition of employment. They are inherently limited however by their strong reliance upon past trends to drive econometric forecasting models.
- Labour supply-based techniques have similar advantages and disadvantages.
- Projecting forward on the basis of past take-up has the advantage of utilising available historic evidence on actual realised market demand. The disadvantage with this approach however is that projecting take-up rates forward on a linear basis assumes that the property market and economy will continue to behave as it has in the past, and that demand is not constrained or subject to change by other factors. This is a significant constraint in terms of establishing an informed view of future demand.

The approach applied in the ELR is based on a combination of labour demand and supply forecasts, which are considered in the context of evidence on historic, market take-up. The advantage of this approach is that it enables both market conditions and the expected impacts of economic development policy to be taken into account. Overall, the approach is based on the consideration of a range of evidence, both quantitative and qualitative, in order to inform the development of alternative scenarios for future growth.

This approach is consistent with Planning Practice Guidance (PPG) that states that Plan makers should consider:

- Sectoral and employment forecasts and projections (labour demand);
- Demographically derived assessments of future employment needs (labour supply techniques);

- Analyses based on the past take-up of employment land and property and/or future property market requirements;
- Consultation with relevant organisations, studies of business trends, and monitoring of business, economic and employment statistics.

2.3.2 Use of econometric forecasts

The employment growth scenarios developed are based on the Oxford Economics Local Authority District Forecasting Model. This model is produced by Oxford Economics and published quarterly.

Both of the scenarios tested use the January 2022 forecast. The key underlying assumptions of these forecast are outlined below.

The latest surge of Covid-19 cases negatively impacted activity across the UK in late 2021 and into 2022, but OE expect this disruption was short-lived and less than in previous waves. The impacts were felt most in the consumer-focused sectors, as large numbers of people were required to isolate or choose to stay home. But Covid case numbers fell in January and high-frequency data suggests this has resulted in a recovery in social consumption activities. Thus, OE expect the threat from Omicron to recede and output to quickly return to pre-Omicron levels.

The key drivers of the short-term forecast are:

- High inflation to prove temporary - inflation continues to be pushed higher by rising petrol prices and upward pressure on global goods prices from supply-chain bottlenecks. But OE expect the rise in inflation to prove temporary; expectations remain well anchored and the risk of a wage-price spiral looks low;
- Tighter fiscal policy - fiscal policy was exceptionally stimulative throughout the early stages of the pandemic. But that support is being withdrawn, with the furlough scheme and temporary uplift to universal credit having ended. In addition, the government provided only modest financial support to companies in the hospitality sector that struggled to deal with the hit to demand from the Omicron wave;
- Monetary policy support being steadily withdrawn - the MPC has begun the process of moving away from emergency monetary policy settings by ending asset purchases and, at its February meeting, raising Bank Rate from 0.25% to 0.5%. The MPC's rhetoric is increasingly hawkish;
- Consumers will spend some of their excess savings - limited opportunities to spend in 2020-21 saw households repay unsecured credit and accumulate savings. This strengthening of household balance sheets has left consumers in a strong position to take on new credit and spend some of their excess savings; and
- Strong recovery in business investment - the early stages of the recovery have been slow, but business surveys have reported more robust investment intentions in recent months as firms responded to strengthening demand.

The Oxford Economics Local Authority District Forecasting Model sits within the Oxford suite of forecasting models. This structure ensures that global and national factors (such as developments in the Eurozone and UK Government fiscal policy) have an appropriate impact on the forecasts at a local authority level.

The local forecasting model depends essentially upon three factors:

- National/regional outlooks – all the forecasting models are fully consistent with the broader global and national forecasts which are updated on a monthly basis;
- 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 built up over decades of expertise; and
- Fundamental economic relationships which interlink the various elements of the outlook.

2.3.3 Future catalysts for employment growth

As identified in Section 2, important catalysts for employment growth in the East Riding include:

- Clean energy;
- Advanced manufacturing including the rail related supply chain; and
- The creation of Humber Freeport

It is noted that the creation of Humber Freeport has been officially confirmed by Government since the ELR 2019/20. In March 2021, the Humber was announced as one of the UK's first wave of eight freeports. Humber Freeport will take in a wide 45km area expanding across both banks of the Humber, with a limited number of specific 'tax zones' identified[2].

The clean energy sector is a particularly significant and rapidly growing sector in the UK economy. With its estuary, ports and associated marine assets, the Humber is uniquely placed to benefit from this growth. Strategic employment locations in the East Riding are also expected to play an important role in enabling future growth. In particular, the M62/Energy Corridor Strategic Development Zone (SDZ) is attractive to investors and has the potential to facilitate further growth.

These future catalysts for employment growth are factored into the 'higher growth' scenario, one of the two scenarios tested.

2.3.4 Description of scenarios

The employment growth scenarios reflect a range of different potential outcomes for employment growth in the East Riding in the period to 2039.

[2] See https://humberfreeport.org

Two alternative scenarios are considered:

- **'Baseline'** – This scenario is based on the latest January 2022 forecast using the Oxford Economics model. This scenario reflects the expected baseline economic performance based on long term historic employment trends and assumptions in relation to UK macroeconomic growth; and
- **'Higher growth'** – This scenario adds additional employment to the 'baseline' scenario based on committed development projects, inward investment pipeline and additional 'policy on' growth. This scenario reflects the potential for higher economic performance and could also be considered as the 'policy on' scenario, reflecting the ambitions of ERYC and the Hull and East Yorkshire LEP[3] (HEY LEP). It factors in the three identified catalysts for future employment growth.

It is noted that anticipating future employment growth remains particularly challenging at the time of this update.

As this update is written in spring 2022, the UK economy is navigating adverse shocks relating to the departure of the UK from the European Union and the Covid-19 Pandemic. The transition period for the UK to exit the EU ended on 31st December 2020. The end of the transition period has meant that significant changes have occurred in practical terms for UK businesses and consumers. Businesses and consumers are still adapting to these changes and certain areas of the economy have experienced a greater impact than others.

Recent disagreement between the UK and EU in relation to the Northern Ireland Protocol has created further uncertainty. There is a risk that the current trade agreement could be suspended which would broadly represent a 'no deal' outcome. In this scenario, UK businesses would lose their current access agreements to the EU market and there is a risk of a trade war between the UK and EU.

This has coincided with significant economic disruption that has been the result of policy choices in relation to the Covid-19 Pandemic. Again, as with the departure from the EU, these impacts have differed across sectors. The consequences for the labour market are particularly significant and some sectors are experiencing difficulties in recruiting suitable workers.

More recently, an environment of heightened geopolitical risk has emerged as a result of conflict in Ukraine. This has placed increased pressure on an already fragile global economy as it recovers from the Covid-19 Pandemic. In addition to the adverse impact on confidence as peace and security is threatened, some businesses face specific challenges due to the imposition of trade sanctions and supply chain disruption as a result.

Despite these challenges, nationally the policy context continues to evolve rapidly, with Government's focus on 'levelling-up', international trade including freeports, achieving net zero, the launch of the Government's Build Back Better: Our Plan for Growth, and the Shared Prosperity Fund all setting the pace of national policy and

[3] See https://heylep.com

investments. These will shape the opportunities to access economic stimulus and funding over the life of this parliament.

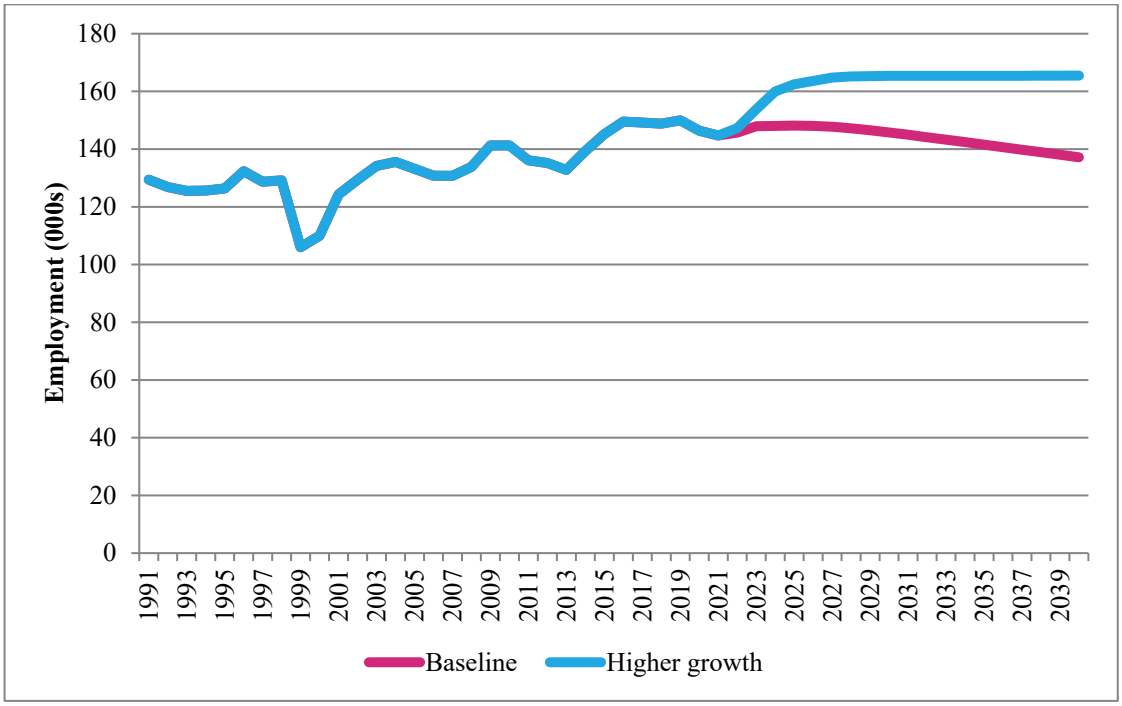
There are also a number of positive factors locally that are expected to support future economic growth in the East Riding. These include:

- Recent trend growth in employment and employment land take-up in the East Riding;
- Major local economic drivers including development of the clean energy sector, advanced manufacturing and Humber Freeport; and
- An ongoing proactive local economic development policy toward stimulating growth by attracting new inward investment.

These factors are evidenced in Section 2 ('Economic Context') of the ELR 2019/20 and Section 2.8.

Reflecting this range of possibilities, in this ELR the requirement for future employment space is assessed under a range of future scenarios for economic growth over the period to 2039, shown in Figure 10. This enables consideration of the potential impacts of different levels of economic performance in the East Riding.

Figure 2: ELR Employment Growth Scenarios to 2039[4]



In order to establish scenarios for future employment growth, it is necessary to make a number of informed assumptions. Table 4 outlines the parameters of the scenarios

[4] Source: Edge (2022) drawing on independently produced employment forecasts and local evidence.

including the source of employment growth projections and, where applicable, key assumptions applied.

Table 1: ELR employment growth scenarios - assumptions[5]

Scenario	Employment Growth 2020-2039		Source	ELR assumptions
	Total	Annual average		
Baseline	-8,326	-438	Independently produced Local Authority District Forecasting Model 'baseline' forecast (January 2022 release)	As per forecast
Higher growth	+19,092	+1,005	Independently produced Local Authority District Forecasting Model 'baseline' forecast (January 2022 release) Assumptions made to generate a 'higher growth' scenario based on this forecast	This scenario adds additional employment to the 'baseline' scenario based on committed development projects, inward investment pipeline and additional 'policy on' growth. It factors in the three identified catalysts for future employment growth. Data on inward investment from the Council has been utilised. This scenario assumes that there are around 20,000 additional jobs. These jobs are added into the 'baseline' model to generate a higher scenario (note that the end jobs output of the model is greater as it takes into account the knock-on impact of new jobs throughout the economy). This scenario represents a notional 'higher growth' scenario. Broadly, it represents the case where all current employment developments are completed, the majority of the investment pipeline comes forward and significant 'policy on' employment growth is achieved. It is illustrative and does not represent a forecast.

The East Riding's future economic performance will depend on a number of factors. These include the impacts of the three identified economic drivers once these have been fully realised, specific policy measures to stimulate a higher rate of local

[5] Source: Edge (2022) drawing on independently produced employment forecasts and local evidence.

economic growth and the broader macroeconomic performance of the UK economy (including after the end of the EU-UK transition period).

The scenarios can be considered to represent different outcomes. Whilst the 'baseline' forecast could be considered robust in its own right, it remains that trend-based forecasts that do not take into account some of the evidence collected for this assessment. Reflecting the emphasis of the NPPF on supporting sustainable economic growth, we have made amendments to assumptions of the 'baseline' forecast to reflect these local considerations in order to generate a 'higher growth' scenario.

The **'baseline' scenario** is broadly considered to represent the pessimistic case without taking account of the three identified local economic drivers and the impact of economic development policy. It is based on the independently produced Local Authority District Forecasting Model 'baseline' forecast (January 2022 release), produced using econometric modelling of employment.

This is considered an appropriate pessimistic case because:

- It is the latest forecast produced at a time of high economic uncertainty; and
- Recent employment trend data suggests that this projection is very pessimistic.

This is a more pessimistic outlook than the low scenario included in the 2014 ELR; projecting an annual average change of -438 jobs compared with +339 jobs previously. In the ELR 2019/20, the respective figure was -442 jobs.

The '**higher growth' scenario** represents the optimistic case, taking into account the potential positive impacts generated in the future by the three identified local economic drivers. In broad terms, this could also be considered to represent a 'policy on' environment with higher growth being achieved in specific sectors. In particular, this scenario assumes growth in the Manufacturing and Transport & Distribution sectors in the East Riding, in contrast to contractions projected in the 'baseline' scenario.

This scenario represents a notional 'higher growth' scenario based on the assumption of an additional 20,000 jobs. Broadly, it represents the case where all current employment developments are completed, the majority of the investment pipeline comes forward and significant 'policy on' employment growth is achieved. It is illustrative and does not represent a forecast.

It should be noted that this additional 20,000 jobs is fed back into the econometric model and there yields a greater final number of additional jobs (since the model incorporates further economic multiplier effects).

The 'higher growth' scenario is based on the January 2022 'baseline' forecast with adjustments made to provide a more optimistic scenario. This produces an annual average jobs figure of +1,005. The high scenario in the 2014 ELR had a base annual average jobs figure of +756 jobs. In the ELR 2019/20, the respective figure was +685 jobs.

The overall Compound Annual Growth Rate (CAGR) under the two scenarios is as follows:

- Baseline (-0.3%)
- Higher growth (+0.6%)

The scenarios test projected growth of between -438 and +1,005 jobs per annum. Comparing these levels with historic trends in the East Riding is challenging due to constraints in obtaining consistent data over a sufficiently long-time period to smooth out the effects of the economic cycle. In 2010-2020, the annual average growth was +500 jobs[6].

Overall, the width of the range between the 'baseline' and 'higher growth' scenarios is wider in this ELR than the 2014 ELR and ELR 2019/20. This reflects the higher level of uncertainty attached to significant economic variables at this time.

2.3.5 Projections of past take-up

In addition to the employment-based scenarios ('baseline' and 'higher growth'), a further scenario based on historic employment land take-up is included. This is considered contextually with the emphasis being on the 'baseline' and 'higher growth' employment growth scenarios.

This analysis is based on take-up data provided by the Council. In methodological terms, it is noted that the Council count land as being taken up when a spade is in the ground. This means that it can take some years before jobs are reflected in the data (e.g. Siemens at Goole forms part of the most recent take up data but it is not employing people currently outside of construction).

2.4 Mapping employment in different sectors to B-class uses

The employment forecasts that inform the employment scenarios provide forecasts for 19 industrial sectors.

Through the analysis undertaken for the ELR, the composition of employment in these sectors has been considered in order to estimate the percentage of employment that can typically be expected to take place in B-class employment floorspace. The proportion of employment in different sectors that can be expected to take place in the following B-class sectors has been estimated:

- Office - Use Classes B1a (office) and B1b (research & development);
- Industrial - Use Classes B1c (light industrial) and B2 (industrial);
- Distribution - Use Class B8 (warehouse and distribution).

[6] Based on total jobs figure from ONS Employment Density Statistics.

The analysis does not estimate requirements for retail floorspace. These requirements are addressed in a retail study and are not within the scope of an ELR.

Table 5 outlines the distribution of space requirement by use class for employment growth in each of the 19 industrial sectors. For example, this shows that 100% of new jobs in the Finance & insurance sector are expected to require B1 office space.

Table 2: Employment sectors to B-class uses[7]

		Use class			
	Sectors	**Office (B1)**	**Ind (B1c/B2)**	**Dist (B8)**	**Total (B class)**
1	Agriculture, forestry and fishing	0%	0%	0%	**0%**
2	Mining and quarrying	0%	0%	0%	**0%**
3	Manufacturing	0%	100%	0%	**100%**
4	Electricity, gas & steam	0%	84%	0%	**84%**
5	Water supply; sewerage, waste management	0%	84%	0%	**84%**
6	Construction	0%	0%	0%	**0%**
7	Wholesale and retail trade	0%	12%	35%	**47%**
8	Transportation and storage	0%	0%	79%	**79%**
9	Accommodation and food service activities	0%	0%	0%	**0%**
10	Information and communication	100%	0%	0%	**100%**
11	Financial and insurance activities	75%	0%	0%	**75%**
12	Real estate activities	75%	0%	0%	**75%**
13	Professional, scientific & technical activities	75%	0%	0%	**75%**
14	Administrative and support service activities	75%	0%	0%	**75%**
15	Public administration and defence	10%	0%	0%	**10%**
16	Education	0%	0%	0%	**0%**
17	Human health and social work activities	10%	0%	0%	**10%**
18	Arts, entertainment and recreation	0%	0%	0%	**0%**
19	Other service activities	35%	0%	0%	**35%**

These assumptions are based on professional experience and established convention applied in undertaking ELRs nationally as well as best practice guidance on Employment Land Reviews. A review of the local evidence base, including local planning applications, has also informed the process. The assumptions are broadly similar to those applied in the 2014 ELR.

Not all employment growth will be associated with allocated employment sites; a considerable proportion of jobs in any area will be associated with existing facilities, such as Public Health and Education that will accommodate significant

[7] Source: Edge (2022).

employment growth within existing premises. Accordingly, it is important to take account of the distinction between growth in economic activity that requires additional employment and that instead arises from productivity gains.

2.5 Translating employment by use class to floorspace (sqm)

In order to translate employment by use class into floorspace requirements, an average employment density (sqm per FTE job) is applied. This works out the gross external area of floorspace, i.e. the footprint of buildings.

In this ELR, the latest published guidance by the HCA[8] on employment densities published is utilised, as outlined in Table 6.

Table 3: Employment densities[9]

Use type	sqm per job	HCA Guide
Office space (B1, a, b)	17	Average of densities across B1a and B1b uses
Industrial space (B1c/B2)	42	Average of densities in B1c and B2
Storage and Distribution (B8)	81	Average of densities in B8

By comparison, the densities applied in the 2014 ELR were 16 sqm (B1), 67 sqm (B2) and 67 sqm (B8). These were based on work undertaken by Roger Tym in 2010[10].

2.6 Translating floorspace to net land requirements (ha)

Floorspace is translated into net land requirements by applying a plot ratio. The net land requirement is the land required before replacement of employment land losses and providing choice/competition in the market are considered.

Plot ratios describe the difference between the level of employment floorspace on a site and the site area. A plot ratio of 1 means that a development of 10,000 sqm gross external area (GEA) of floorspace would sit on a 1-hectare (10,000 sqm) site. To work out the net land requirement for a set GEA of floorspace, the floorspace is divided by the plot ratio. For example, a 10,000sqm GEA development would require 25,000sqm of land (2.5ha).

Plot ratios are influenced by the height of buildings, parking standards and other space requirements on the site (e.g. green space and communal areas). Plot ratios

[8] 'Employment Density Guide' 3rd Edition, HCA (November 2015).
[9] Source: Edge (2022) drawing on HCA Employment Density Guide.
[10] The potential impact of changing work practices on floorspace demand and densities is considered in Section 2.14.

are therefore used to work out the area of a site that would typically be occupied by the footprint of buildings.

In this ELR, the average plot ratios applied are outlined in Table 7.

Table 4: Plot ratios[11]

Use type	Plot ratio
Office (B1, a, b)	0.4
Industrial (B1c, B2)	0.4
Distribution (B8)	0.4

These ratios are in line with recognised convention applied in ELRs across the country. By comparison, a slightly lower figure of 0.35 was applied in the 2014 ELR. A review of recent local planning applications in the East Riding was also undertaken to validate the plot ratio applied in ELR 2019/20.

2.7 Converting net to gross employment land

The net employment land requirement figure is only a part of the process in understanding employment land requirements. Relying on the net figure alone could result in a significant underestimate of land required to support future economic development.

There is a need to make allowances for:

- Replacing the expected future loss of employment sites; and
- Providing for choice and competition in the market.

Allowance for choice and churn

There is no standard approach to calculate the future loss of employment sites and typically a simple assumption that a percentage of stock will be replaced each year is made. In some cases, past losses are projected forward. The analysis within this section does not take into account existing commitments. This aspect is considered elsewhere in the ELR.

Allowing for choice and competition in the market is also important. Land can remain in the development pipeline for a long time without delivering new floorspace. At any one time there is a need to ensure that there is enough readily available (unconstrained) land to meet the gross requirement for each employment use. It is not desirable to have an exhausted land supply at the end of the plan period i.e. no choice available. ELRs nationally typically apply a margin of between 20% and 40%. In this ELR, a margin of 30% (the middle of this range) is applied to account for market choice.

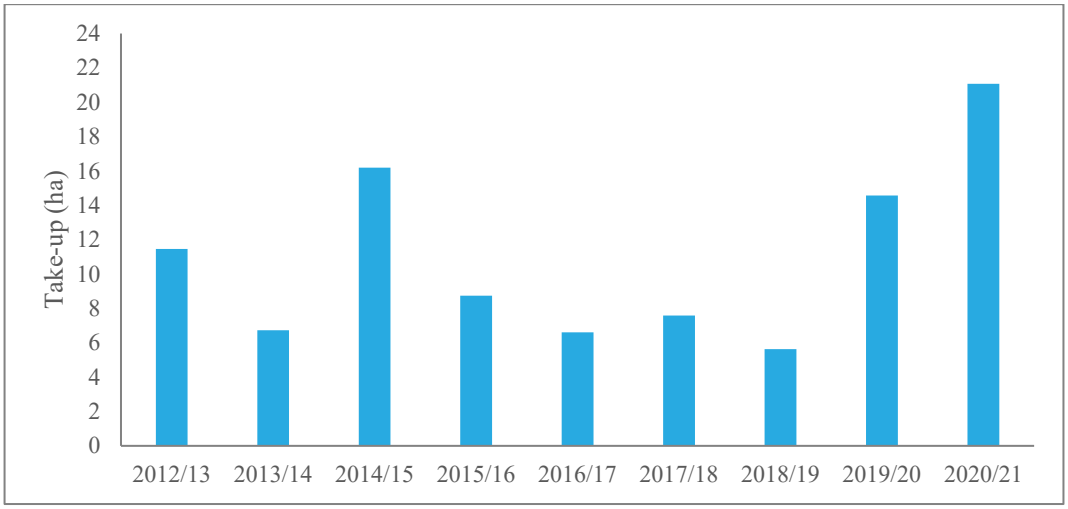
[11] Source: Edge (2022).

2.8 Historic take-up

Historic take-up figures can provide useful data in considering future demand. Historic take-up is considered contextually in this ELR, with the emphasis being on the 'baseline' and 'higher growth' employment growth scenarios.

In the period 2012/13 to 2020/21, there was significant variation in take-up levels year to year with annual take-up ranging from 5.6ha to 21.1ha (Figure 11). In total, take-up was 98.6ha during this period, equivalent to an annual average of 11.0ha.

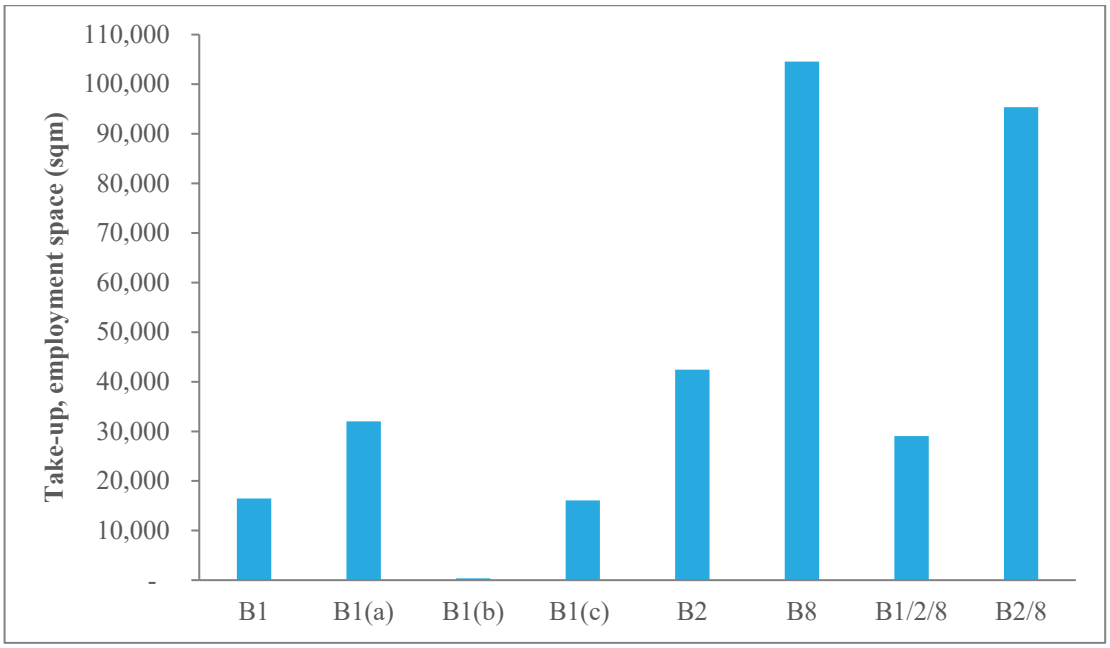
Figure 3: Historic employment land take-up[12]



The majority of employment space take-up during the period 2012/13 to 2020/21 was B8 space. There was also a significant quantum of mixed space, comprising B2/B8 (Figure 12).

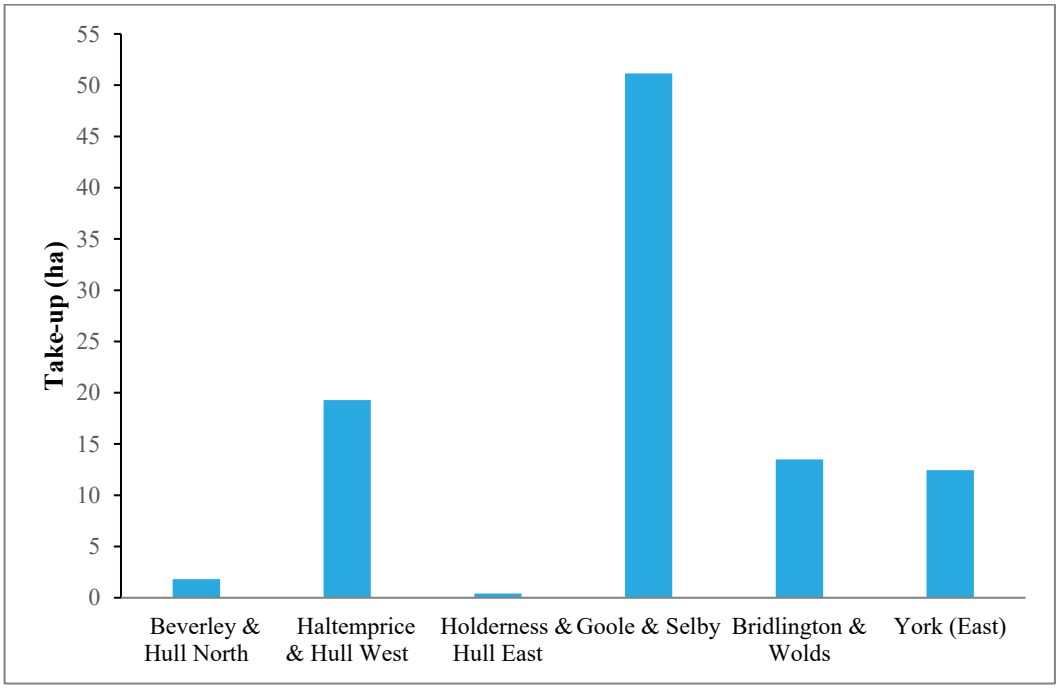
[12] Source: ERYC data. It should be noted that the value for 2020/21 includes projects identified as existing commitments. As construction has started, the land has been taken up from a monitoring perspective but the jobs will occur in the future post completion.

Figure 4: Historic take-up - employment space by use-class[13]



Spatially, the Goole & Selby and Hull (taking its 3 constituents together) FEAs had the greatest take-up levels (Figure 13). Together, these two FEAs accounted for the order of 74% of total take-up during the period 2012/13 to 2020/21.

Figure 5: Historic take-up - by FEA[14]



[13] Source: ERYC data.
[14] Source: ERYC data.

Overall, the historic data on employment land take-up is supportive of a fairly strong demand picture. Projecting forward, the annual average of 11ha per annum would generate a demand of 208ha over the ELR period to 2039. This should be treated with some caution however since it is based on a relatively short historic time period (2012/13 to 2020/21) and significant variation has been recorded year to year. It is noted that the importance of public sector funding for providing the gap funding necessary for some sites in the East Riding is an important factor in take-up. For example, the relatively higher take-up figure in 2015/16 occurred at time of peak funding activity. This was highlighted during the stakeholder workshop. Accordingly, the nature of the public sector funding environment in the future is expected to be influential in terms of demand.

It is noted that take-up recorded in the two most recent years has been relatively strong, with the most recent year recording the highest annual figure of the period 2012/13 to 2020/21.

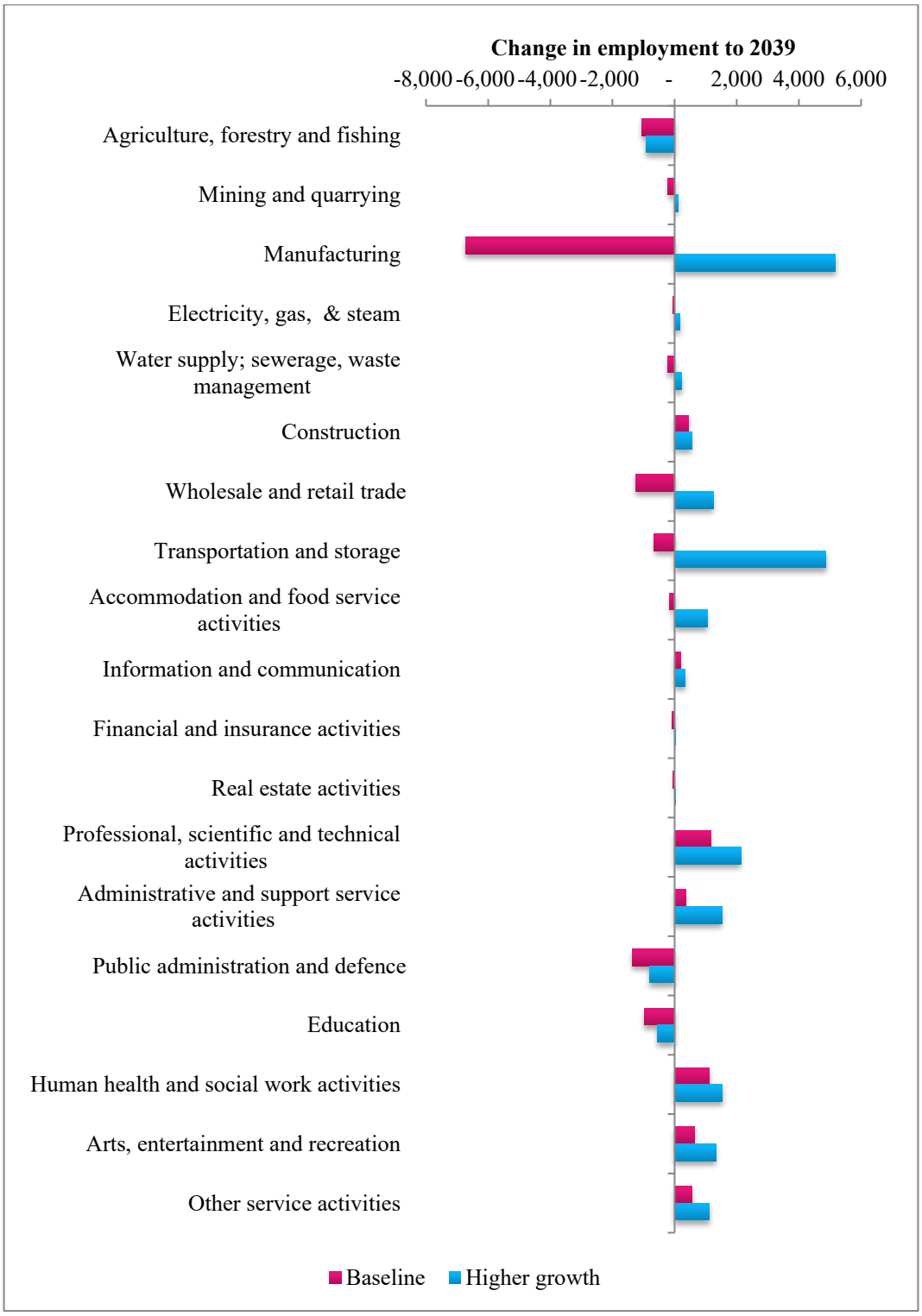
2.9 Employment Growth Scenarios

In the baseline scenario, overall employment is projected to contract by a total of -8,326 jobs over the period from 2020 to 2039; this is equivalent to an annual average contraction of -438 jobs.

In the higher growth scenario, overall employment is projected to expand by a total of 19,092 jobs over the period from 2020 to 2039; this is equivalent to an annual average growth rate of 1,005 jobs.

The structural pattern of growth by industrial sector for each of the employment growth scenarios is shown in Figure 14. Only a proportion of the growth in these sectors is assumed to translate into a requirement for core B-class space. Table 8 provides an overview of projected employment growth translated into B-class floorspace class categories.

Figure 6: ELR Employment Growth Scenarios - change by sector[15]



[15] Source: Edge (2022) drawing on independently produced employment forecasts and local evidence.

Table 5: B-class employment change translated to ELR, 2020-2039[16]

Industrial Sector	Total B-class employment change 2020-2039, FTEs	
	Baseline	**Higher growth**
Agriculture, forestry and fishing	0	0
Mining and quarrying	0	0
Manufacturing	-6,732	5,168
Electricity, gas, & steam	-52	139
Water supply; sewerage, waste management	-196	188
Construction	0	0
Wholesale and retail trade	-580	576
Transportation and storage	-521	3,846
Accommodation and food service activities	0	0
Information and communication	185	331
Financial and insurance activities	-56	11
Real estate activities	-38	17
Professional, scientific and technical activities	871	1,601
Administrative and support service activities	266	1,140
Public administration and defence	-136	-81
Education	0	0
Human health and social work activities	111	154
Arts, entertainment and recreation	0	0
Other service activities	196	388
Total	**-6,680**	**13,479**
Annual average employment change	**-352**	**709**

Considering just the proportion of jobs that translate to B-class uses, only the higher growth scenario generates an overall positive figure, shown in Table 8. The forecasts indicate an overall B-class employment change of between -6,680 to +13,479 jobs in the core B-class use categories over the period to 2039. This equates to an annual average change of between -352 and +709 jobs.

Table 9 shows the breakdown of job by B-class use type. This shows that the change in jobs relating to B2 and B8 uses is negative in the baseline scenario.

The change in B1 related jobs is positive in both the baseline and higher growth scenarios. The main driver of the change in demand for B1 office space is the Professional services sector and other private services.

[16] Source: Edge (2022) using independently produced forecasts. Include rounding.

The change in jobs is positive across B1, B2 and B8 uses in the higher growth scenario. The main driver of the change in demand for B2 industrial space is the Manufacturing sector. For B8 space, it is primarily the Transport & storage sector that drives growth.

Table 6: B-class Employment change translated to ELR, 2020-2039[17]

Scenario	B1	B2	B8	Total B-class
Baseline	1,401	-7,124	-957	**-6,680**
Higher growth	3,561	5,638	4,280	**13,479**

The baseline projection for the future indicates a contraction in employment in the East Riding over the period to 2039. Nonetheless, there exist significant factors that are expected to support future economic growth in the East Riding. These are set out above and support a more positive employment growth figure.

2.10 Floorspace Requirement

Drawing together the results from the alternative employment growth scenarios, Table 10 summarises the net floorspace requirement up to 2039 by core B-class use.

Table 7: Net GEA floorspace requirements (sqm), 2020-2039[18]

	Sqm GEA			
Scenario	B1	B2	B8	Total b-class
Baseline	23,211	-295,626	-77,237	**-349,652**
Higher growth	59,017	233,967	345,273	**638,258**

These forecasts reflect a range of potential space requirements. For office space (B1, a, b), the range is between +23,211 sqm and +59,017 sqm. For industrial space (B1c/B2), it is from -295,626 sqm to +233,967 sqm. For distribution (B8), the range of requirement is between -77,237 sqm and +345,273 sqm.

2.11 Net Employment Land Requirement

Net GEA floorspace requirements are translated into net land requirements by applying a plot ratio (using the plot ratios established in Table 7). The resulting land requirements are set out in Table 11:

[17] Source: Edge (2022) using independently produced forecasts. Include rounding.
[18] Source: Edge (2022) drawing on independently produced employment forecasts and local evidence. Include rounding.

Table 8: Net land requirements (ha), 2020-2039[19]

Scenario	Net land requirement (Ha)			
	B1	B2	B8	Total B-class
Baseline	5.8	-73.9	-19.3	**-87.4**
Higher growth[20]	14.8	58.5	86.3	**159.6**

2.12 Gross Employment Land Requirement

To allow for choice and competition in the market, a margin should be applied. This yields the gross employment land requirement. The results of applying a 50% margin are shown in Table 12. It should be noted that the 30% margin is applied only to those sectors that are projected to grow. Accordingly, the difference in the aggregate figures in Table 11 and Table 12 is not always 30%. Table 13 provides the average annual land requirement for B-class space.

Table 9: Gross land requirements (ha), 2020-2039[21]

Scenario	Gross land requirement (Ha)			
	B1	B2	B8	Total B-class
Baseline	7.8	-73.9	-19.3	**-85.4**
Higher growth[22]	19.3	76.0	112.2	**207.5**

Table 10: Gross land requirements, average annual (ha), 2020-2039[23]

Scenario	Gross land requirement (Ha) - Annual average			
	B1	B2	B8	Total B-class
Baseline	0.4	-3.9	-1.0	**-4.5**
Higher growth	1.0	4.0	5.9	**10.9**

Overall, the results indicate a gross employment land requirement over the ELR period in the range of -85.4 ha to +207.5 ha. This equates to an annual average of between -4.5 ha and +10.9 ha.

[19] Source: Edge (2022) drawing on independently produced employment forecasts and local evidence. Include rounding.
[20] It should be noted that the 30% margin is applied only to those sectors that are projected to grow Accordingly, the difference in the aggregate figures in Table 11 and Table 12 is not always 30%. See Figure 14 and Table 8 for growing sectors.
[21] Source: Edge (2022) drawing on independently produced employment forecasts and local evidence. Margin only applied to positive requirements. Include rounding.
[22] It should be noted that the 30% margin is applied only to those sectors that are projected to grow Accordingly, the difference in the aggregate figures in Table 11 and Table 12 is not always 30%. See Figure 14 and Table 8 for growing sectors
[23] Source: Edge (2022) drawing on independently produced employment forecasts and local evidence. Include rounding.

Across the use classes, in the higher growth scenario the greatest requirement is for B8 space closely followed by B2 space. This is largely driven by the growth of the Manufacturing and Transport & distribution sectors. There is a positive B1 requirement across both the baseline and higher employment growth scenarios tested. This is of a much smaller magnitude than that for B2 and B8 space however.

2.13 Estimated requirement by Functional Economic Area

To allow an analysis at FEA level, the land requirements associated with the econometric modelling can be disaggregated by FEA based on evidence provided by historic take-up data. Historic take-up data has been analysed on a per FEA basis to understand the proportion of overall take-up falling within each FEA. These proportions have then been applied to the employment land demand figures for the baseline and higher growth scenarios.

Historic trends are useful in estimating how future demand may be distributed spatially. Some caution is required however, and the results should be interpreted in the context of other evidence/policy. It should be noted that the spatial distribution of demand across FEAs may change over time, for example due to changes in land availability or policy direction through the Local Plan. Consideration should also be given to the spatial distribution of jobs indicated by identified committed and pipeline jobs which may differ from the distribution evident in historic trends.

Table 14 and Table 15 summarise the results for gross land requirement over the ELR period for the baseline and higher growth scenarios. In the higher growth scenario, the majority of the requirement is in the Goole & Selby and Hull FEAs (taking Hull's 3 constituents together). Together, these FEAs account for 152.9 ha of the total estimated requirement of 207.5 ha.

This disaggregation is indicative and should be interpreted in conjunction with the commercial property market analysis.

Table 11: Gross land requirements (ha), 2020-2039 - by Functional Economic Area (baseline scenario)[24]

Baseline Scenario				
Functional Economic Area	**Gross land requirement (Ha)**			
	B1	**B2**	**B8**	**Total B-class**
Goole & Selby	4.1	-38.3	-10.0	**-44.3**
Hull:				
• Beverley & Hull North	0.1	-1.4	-0.4	**-1.6**
• Haltemprice & Hull West	1.5	-14.5	-3.8	**-16.7**
• Holderness & Hull East	0.0	-0.3	-0.1	**-0.4**
York (East)	1.0	-9.3	-2.4	**-10.8**
Bridlington & Wolds	1.1	-10.1	-2.6	**-11.7**
Total (baseline)	**7.8**	**-73.9**	**-19.3**	**-85.4**

Table 12: Gross land requirements (ha), 2020-2039 - by sub-area (higher growth scenario)[25]

Higher growth scenario				
Functional Economic Area	**Gross land requirement (Ha)**			
	B1	**B2**	**B8**	**Total b-class**
Goole & Selby	10.0	39.4	58.2	**107.7**
Hull:				
• Beverley & Hull North	0.4	1.4	2.1	**3.8**
• Haltemprice & Hull West	3.8	14.9	21.9	**40.6**
• Holderness & Hull East	0.1	0.3	0.5	**0.9**
York (East)	2.4	9.6	14.2	**26.2**
Bridlington & Wolds	2.6	10.4	15.4	**28.4**
Total (higher growth)	**19.3**	**76.0**	**112.2**	**207.5**

[24] Source: Edge (2022) drawing on independently produced employment forecasts and local evidence. Margin only applied to positive requirements. Include rounding.
[25] Source: Edge (2022) drawing on independently produced employment forecasts and local evidence. Include rounding

2.14 Potential influences on future office space demand

There are two issues which may potentially impact on the future office space demand:

1. The legacy of the Covid-19 Pandemic for working practices; and
2. Use class order changes.

The durability and legacy of the Covid-induced shift to remote working is a subject of debate. At the time of this report, the UK is also at a relatively early stage in its emergence from the Pandemic. Accordingly, it is too early to determine the extent to which the changes in working practices to include more home and flexible working will become entrenched for the longer-term. Broadly, however, three potential scenarios may be envisaged:

- Scenario 1: A return to close to pre-pandemic norms - with a small minority of workers adopting a more flexible working pattern and this being limited to certain professions;
- Scenario 2: A new hybrid working pattern – with the majority of workers adopting a hybrid model of remote-working (e.g. 3-2 day arrangement); and
- Scenario 3: A step-change to regular long-term remote working across many occupations and industries with the traditional 5-0 week being limited to a minority, represented by largely manual/customer-facing occupations.

In the middle scenario, Scenario 2, through a widespread hybrid model of remote working, the demand for office floorspace could remain largely the same, as the benefits of an office presence prevails despite more flexible working arrangements. There may be an increased emphasis on flexible, interaction-led office space. This may be accompanied by a reduction in demand for more dated, lower-quality office space that less amenable to remote working.

For the purposes of this ELR update, it is not proposed that the quantitative estimates of office employment space are adjusted. It is however recommended that policy remain flexible and open to the possibility that the quantum of office space required could be lower, particularly if Scenario 3 were to come to fruition. Moving forward, there is a need for the planning system to monitor the situation and build in additional flexibility and responsiveness.

The recent changes to the use class order may also have implications for future office space demand. These changes mean that B1 now forms part of the broad E Town Centre use class. This comes with permitted development rights enabling owners to change between the sub-uses.

These changes will influence planning for future employment needs. Existing policies to protect employment space will become less effective where these relate

to existing B1(a/b/c) premises. This could potentially alter the composition of existing employment areas and reduce the supply of existing employment space.

2.15 Implications

The scenarios tested using econometric forecasts represent one part of the picture in considering future employment land demand. The results should be considered alongside other evidence outlined in this ELR such as historic take-up, the property market analysis and the views of businesses on the ground gained through the stakeholder engagement.

The historic data on employment land take-up is supportive of a fairly strong demand picture – subject to caveats – with an annual average of 11ha per annum. This would suggest planning for towards the upper end of the range indicated by the scenarios.

It is too early to determine the durability and legacy of the Covid-induced shift to remote working. Several potential scenarios may be envisaged. Moving forward, there is a need for the planning system to monitor the situation and build in additional flexibility and responsiveness.

Summary

- Anticipating future employment growth remains challenging at the time of this update. The UK economy is navigating adverse shocks relating to the departure of the UK from the European Union and the Covid-19 Pandemic. The end of the EU transition period has meant that significant changes have occurred in practical terms for UK businesses and consumers. This has coincided with significant economic disruption that has been the result of policy choices in relation to the Covid-19 Pandemic.
- More recently, an environment of heightened geopolitical risk has emerged as a result of conflict in Ukraine. Recent disagreement between the UK and EU in relation to the Northern Ireland Protocol has also created further uncertainty in terms of post-Brexit trade arrangements.
- Despite this uncertainty, there are a number of positive factors locally that are expected to support future economic growth in the East Riding. These include:
    - Recent trend growth in employment and employment land take-up in the East Riding;
    - Major local economic drivers including development of the clean energy sector, advanced manufacturing and Humber Freeport; and
    - An ongoing proactive local economic development policy toward stimulating growth by attracting new inward investment.
- The ELR adopts a scenario-based approach to employment growth. This responds to the need for the ELR to plan sufficiently for growth and take into account the potential range of employment growth that could occur;
- The employment growth scenarios developed are based on the Oxford Economics Local Authority District Forecasting Model;
- Both of the scenarios tested use the January 2022 forecast. The Oxford Economics Local Authority District Forecasting Model sits within the Oxford suite of forecasting models.

This structure ensures that global and national factors (such as developments in the Eurozone and UK Government fiscal policy) have an appropriate impact on the forecasts at a local authority level.

- In the baseline scenario, overall employment is projected to contract by a total of -8,326 jobs over the period from 2020 to 2039; this is equivalent to an annual average contraction of -438 jobs. In the higher growth scenario, overall employment is projected to expand by a total of 19,092 jobs over the period from 2020 to 2039; this is equivalent to an annual average growth rate of 1,005 jobs;
- The higher growth scenario adds additional employment to the 'baseline' scenario. This scenario represents a notional 'higher growth' scenario based on the assumption of an additional 20,000 jobs. Broadly, it represents the case where all current employment developments are completed, the majority of the investment pipeline comes forward and significant 'policy on' employment growth is achieved. It should be noted that the scenario is illustrative and does not represent a forecast;
- Considering just the proportion of jobs that translate to B-class uses, only the higher growth scenario generates an overall positive figure. The forecasts indicate an overall B-class employment change of between -6,680 to +13,479 jobs in the core B-class use categories over the period to 2039. This equates to an annual average change of between -352 and +709 jobs;
- The results indicate a gross employment land requirement over the ELR period in the range of -85.4 ha to +207.5 ha. This equates to an annual average of between -4.5 ha and +10.9 ha;
- Across the use classes, in the higher growth scenario the greatest requirement is for B8 space closely followed by B2 space. This is largely driven by the growth of the Manufacturing and Transport & distribution sectors. There is a positive B1 requirement across both the baseline and higher employment growth scenarios tested. This is of a much smaller magnitude than that for B2 and B8 space however;
- In the higher growth scenario, the majority of the requirement is in the Goole & Selby and Hull (taking Hull's 3 constituents together) FEAs. Together, these FEAs account for 152.9 ha of the total estimated requirement of 207.5 ha. This disaggregation is indicative and should be interpreted in conjunction with the commercial property market analysis;
- The scenarios tested using econometric forecasts should be considered alongside other evidence outlined in this ELR such as historic take-up, the property market analysis and the views of businesses on the ground. The historic data on employment land take-up is supportive of a fairly strong demand picture – subject to caveats – with an annual average of 11ha per annum. This would suggest planning for towards the upper end of the range indicated by the scenarios.