

# **A Current Socio-economic Profile of East Lindsey and an Economic Impact Assessment of a Geological Disposal Facility in East Lindsey**

**February 2025**



## **Foreword**

East Lindsey is a district of unique character, celebrated for its natural beauty and strong community spirit. However, like many rural areas, it grapples with persistent challenges, including an ageing population, skills shortage, and economic underperformance compared to regional and national averages. Addressing these issues requires bold, long-term strategies to foster a prosperous and sustainable future for the district and its residents.

This report provides a detailed socio-economic profile of East Lindsey, along with an analysis of the potential economic impact associated with hosting a Geological Disposal Facility (GDF) in the district. It explores the district's challenges while considering opportunities for future economic transformation.

We hope this report serves as a valuable resource for policymakers, businesses, and community leaders as they explore pathways to unlocking East Lindsey's potential. We encourage all stakeholders to engage with the insights and possibilities outlined in this report as part of broader discussions on the district's future.

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**Chief Executive, Midlands Engine**

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# Executive Summary

## Key themes

East Lindsey, a district renowned for its picturesque landscapes and vibrant coastal towns such as Mablethorpe, faces a unique set of economic challenges and opportunities.

This report provides a comprehensive overview of East Lindsey's economic landscape, including a socio-economic profile that examines its key strengths, weaknesses, and opportunities for growth. Additionally, the report includes an economic impact assessment that evaluates the potential benefits of a Geological Disposal Facility (GDF), highlighting its capacity to drive significant economic growth, create jobs, and enhance long-term regional resilience. Key themes explored in this report include:

- **Population and Quality of Life:** the report provides examines the age profile of the population of East Lindsey whilst also providing insights on income, qualification and deprivation levels. It also discusses how the population of East Lindsey is forecasted to change.
- **Regional Economy:** the report explores how the economic growth in the district compares to the wider Greater Lincolnshire Combined Authority area and the national average, as well as the economy's growth over time. It also outlines through forecasting models how the economy will grow.
- **Enterprise and Infrastructure:** The report evaluates East Lindsey's business density, sector concentration and survival rates. It also reviews transport and digital infrastructure, highlighting key assets that could support economic development.
- **Labour Market and Skills:** The report provides an in-depth analysis of the labour market dynamics in East Lindsey, including employment rates, occupational trends, skills gaps, and wage levels. It also highlights future changes in the composition of the labour market through forecasting.

By examining these interconnected factors, this report seeks to provide a comprehensive understanding of East Lindsey's economic profile and highlight the potential impact a GDF could have on the local and regional economy.

## Understanding East Lindsey – key findings

### Socio-economic Profile

- **East Lindsey's population is ageing faster than the national average**, with a significant proportion of residents aged 65 and over. This demographic shift has implications for the future labour force and the demand for age-related services. The district also faces challenges related to lower gross disposable household income per head and lower skills levels compared to other areas in Lincolnshire.
- The district's economic performance also lags behind several of its regional counterparts in terms of Gross Value Added (GVA). **The district's GVA per head is significantly lower than both the combined authority and national level, indicating lower productivity.** While East Lindsey's economy is forecast to grow in the coming years, it is still expected to underperform compared to its wider geographies.
- Furthermore, **East Lindsey has a relatively low business density and a lack of larger employers.** The district also faces challenges related to business survival rates, with businesses in East Lindsey being more vulnerable to external shocks. While East Lindsey has assets like its coastline and natural beauty that support tourism, it suffers from poor transport links and challenges with broadband speed and reliability in rural areas.
- In addition, **East Lindsey faces a concerning skills gap, with a lower proportion of the population possessing higher-level skills.** The region's employment rate, while showing recent gains, continues to lag behind the national average. East Lindsey demonstrates a higher concentration in 'Skilled Trade Occupations' and 'Process, Plant and Machine Operatives' compared to regional and national averages, indicating a need to attract and retain highly skilled professionals. The median advertised salary in East Lindsey is lower than the national average, despite significant increases in the past year.

## Economic Impact Assessment

- **An economic impact assessment has been conducted** comparing the baseline ‘do nothing’ scenario with three different scenarios based on a GDF being built and varying levels of job ‘leakage’ in East Lindsey.

In the context of this report, ‘job leakage’ refers to the proportion of jobs associated with a Geological Disposal Facility (GDF) that are not filled by local workers but instead by external specialists from outside the immediate search area. This also includes work completed outside the local area when the necessary skills or roles are unavailable within the local labour market, leading to workforce spillover into the wider supply chain.

For example, if a GDF employs 100 workers with a 30% leakage rate, 70% of the workforce would be drawn locally, while 30% would be sourced externally or performed outside the region.

- **Across all forecasted scenarios, the proposed development of a GDF in East Lindsey would transform the local economy**, enabling significant growth in economic output and productivity. The project would support the diversification of the economy, strengthening key sectors and reducing reliance on traditional, low-growth industries.
- **A GDF would act as a long-term driver of local employment**, creating many jobs across phases such as site characterisation, construction, and operation. These jobs would span various sectors, including construction, professional services, logistics, and business tourism, fostering economic resilience and stability in the region.
- In contrast to a projected decline under the baseline scenario, **a GDF would help retain existing residents and attract new ones, increasing the population and bolstering the working-age demographic**. This increase of people would support a vibrant community and ensure a sustainable labour supply for the local economy.
- **A GDF would unlock substantial community investment funding in the GDF search area** (up to £2.5m per annum should the community proceed to Site Characterisation), supporting initiatives such as support schemes for young people, support for hardship and opportunity to increase pride of place. This funding provides a unique opportunity to address existing challenges and improve the quality of life for residents.
- By reducing unemployment and creating skilled, high-value job opportunities, **the GDF would align East Lindsey’s workforce with modern industry needs**. This transformation would enhance economic participation and drive sustainable growth across the region.

### Potential Impact of a GDF in East Lindsey (2050 ‘Baseline’ vs 2050 Scenarios):

Key Impact Metric	Forecast
<b>Economic Growth</b>	Economy 4.6% larger by 2050.
<b>Cumulative Workplace Jobs</b>	Additional 2,100 workplace jobs by 2050.
<b>Productivity</b>	Average productivity up 0.7% by 2050.
<b>Residents Employed</b>	Additional 1,600 residents employed by 2050.
<b>Resident Employment Rate</b>	1.3pp increase in the resident employment rate by 2050.
<b>Fewer Unemployed Residents</b>	400 fewer residents unemployed by 2050.
<b>Unemployment Rate</b>	1.0pp fall in the unemployment rate by 2050.
<b>Working Age Population Growth</b>	Additional 400 working age residents by 2050.

Overall, East Lindsey faces a unique set of economic challenges and opportunities. The district's ageing population, skills gap, and lower productivity are significant concerns. However, East Lindsey also has assets like its coastline, natural beauty, and key sectors like the visitor economy, agri-food, and manufacturing.

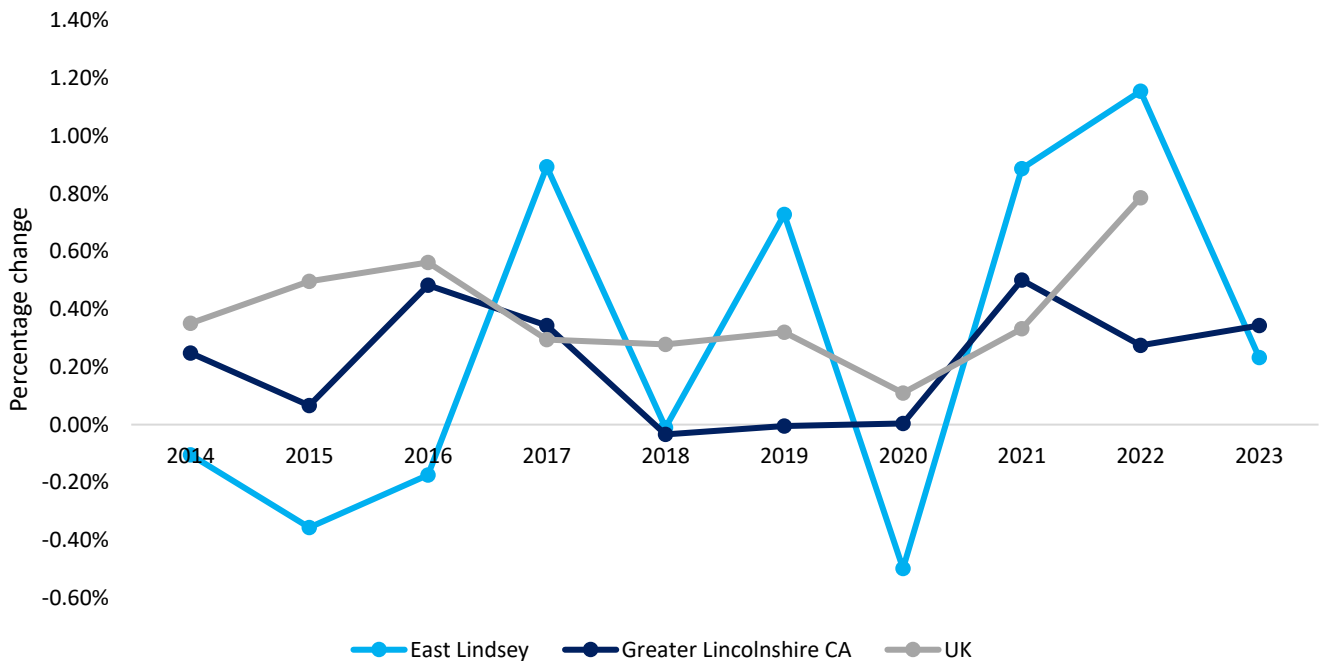
# 1. Socio-economic Profile

## 1.1 Population and Quality of Life

### 1.1.1 Population Trends

- East Lindsey is home to just over **145,000 residents<sup>1</sup>**, equating to 13% of the population of the Greater Lincolnshire Combined Authority (CA) area. **51% of the population is female, with 49% male.**
- **The percentage of the population that could be considered working age (16-64 years old) in East Lindsey is 55%**, lower than both the Greater Lincolnshire (60%) and national proportion (63%).
- While East Lindsey experienced a modest average population growth of 0.6% annually between 2013 and 2023, this masks an internal demographic shift.
- The **working age population (16-64 years old) is growing at a slower average rate than the UK** (0.3% locally vs 0.4% nationally), whilst **the number of residents aged 65+ years old in East Lindsey is growing at a faster average rate than the UK** (1.7% locally vs 1.5% nationally).
- This has contributed to a growing ageing population, with **30% aged 65 and over, significantly above the national average of 19%**. This trend has implications for the future labour force and the demand for age-related services.

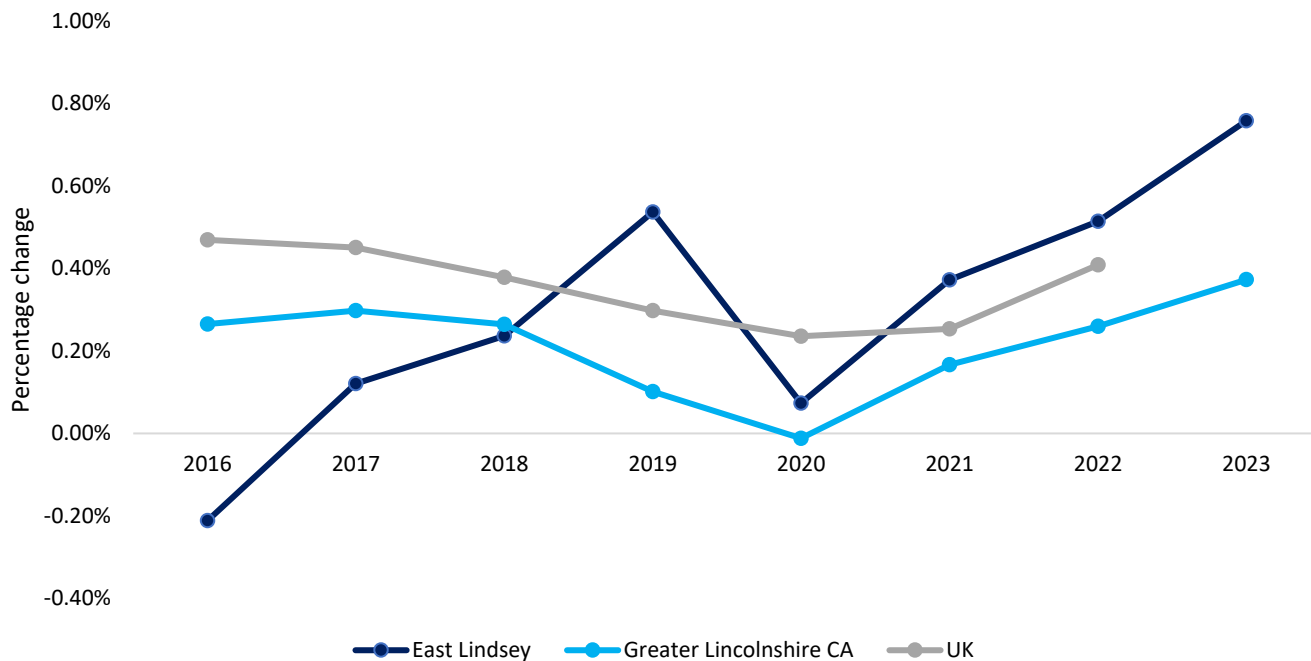
### Percentage change in number of 16-64 year olds<sup>2</sup>



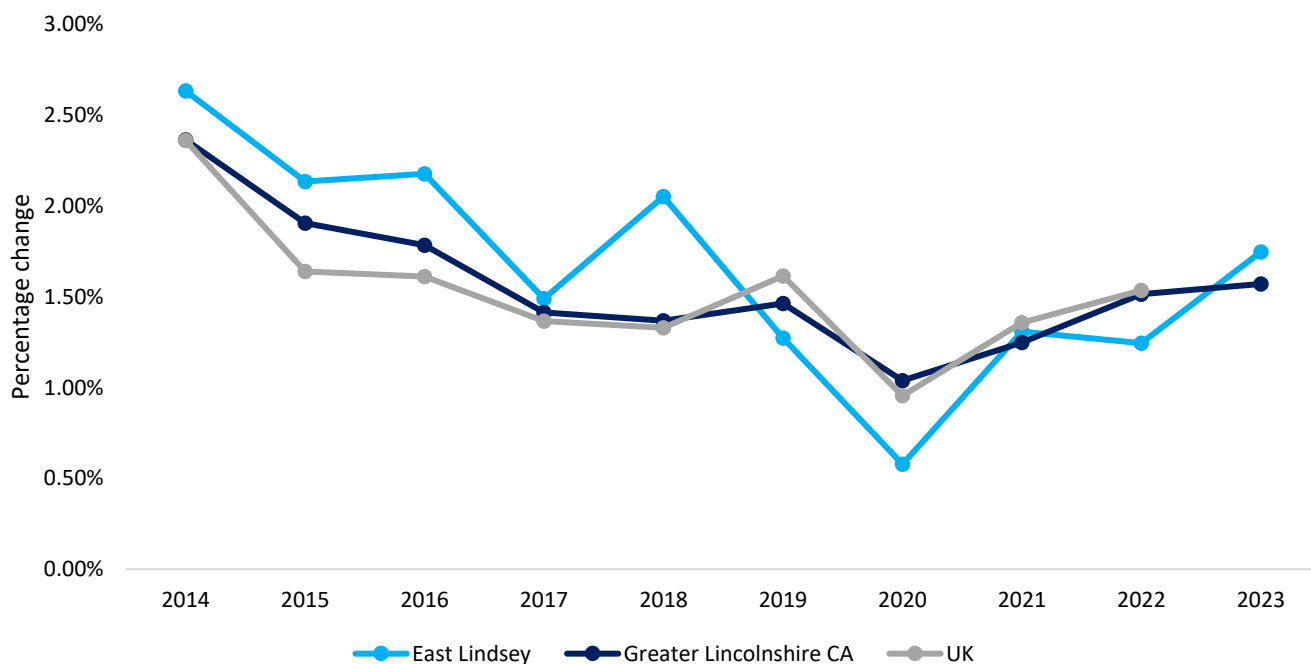
<sup>1</sup> ONS Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland

<sup>2</sup> 2023 population data for UK has not yet been released

**Percentage change in number of 16-64 year olds – 3-year moving average<sup>3</sup>**



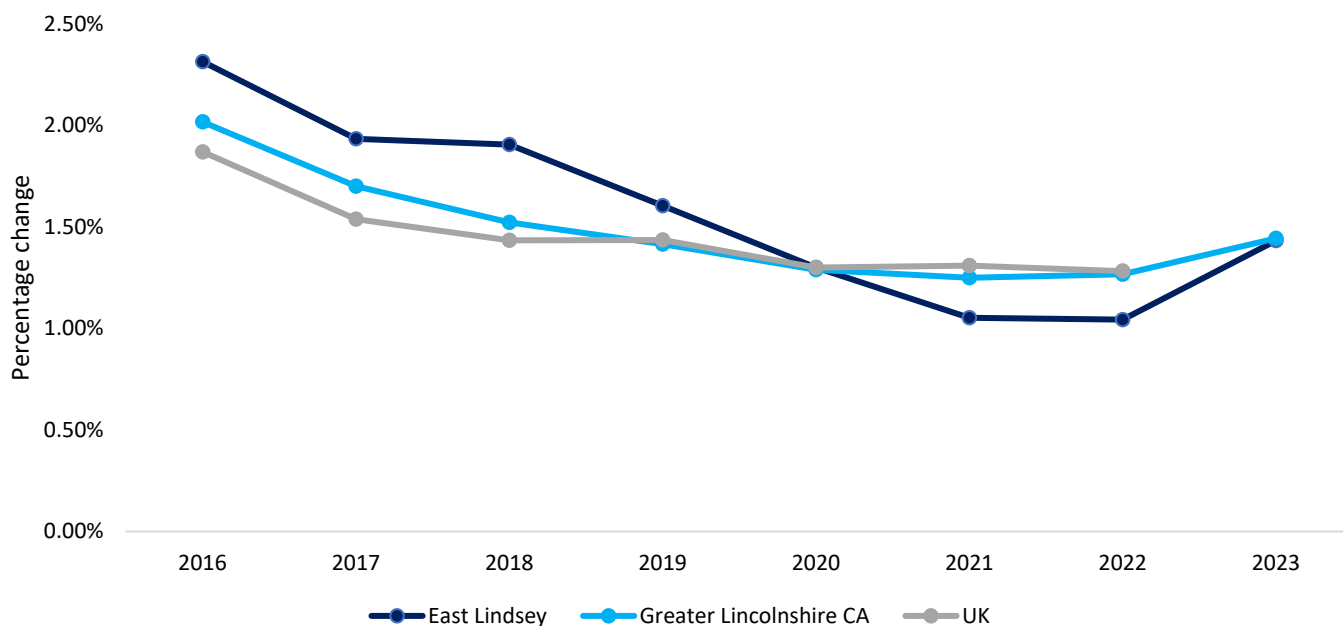
**Percentage change in number of 65+ year olds<sup>4</sup>**



<sup>3</sup> 2023 population data for UK has not yet been released

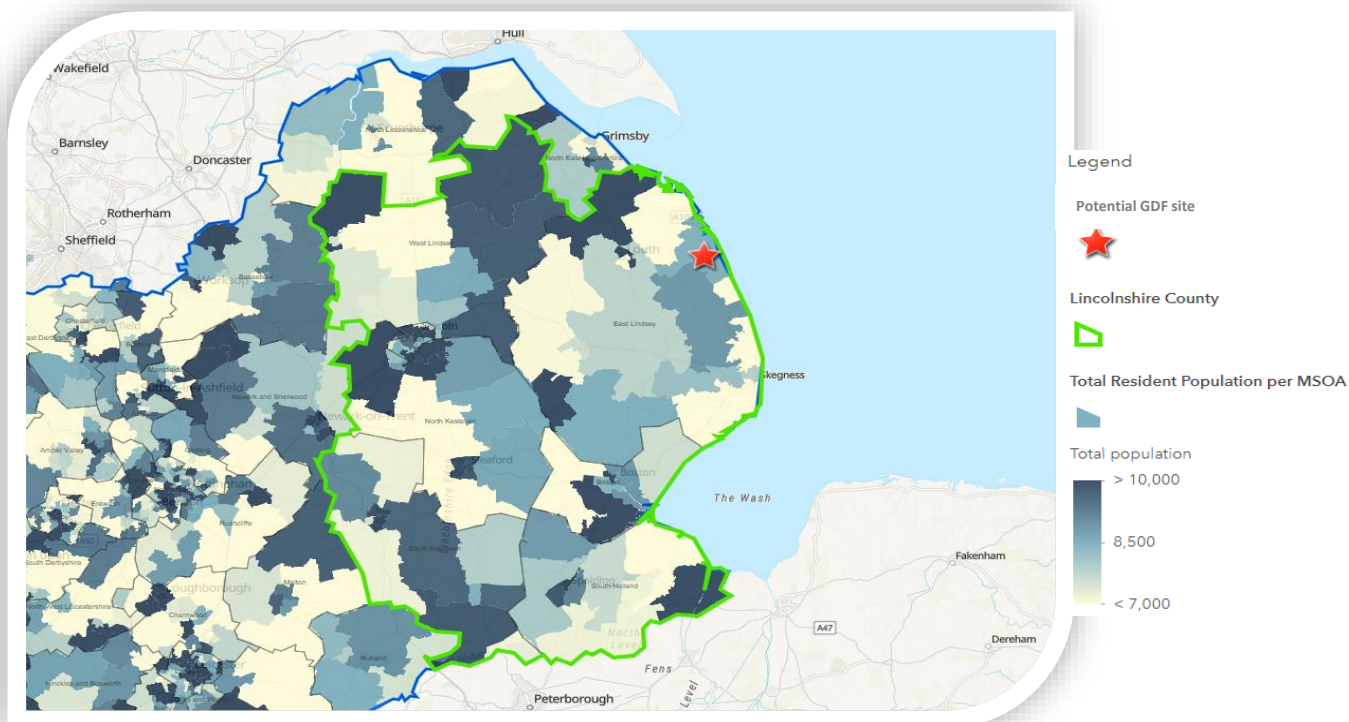
<sup>4</sup> 2023 population data for UK has not yet been released

## Percentage change in number of 65+ year olds – 3-year moving average<sup>5</sup>



- The district of **East Lindsey** is relatively sparsely populated in comparison to neighbouring districts. Although most coastal areas show relatively low levels of occupation of less than 7,000 people per Middle Layer Super Output Area (MSOA), the proposed search area within East Lindsey for the Geological Disposal Facility (GDF) and it's surrounding areas has a higher population of roughly 8,500.

### Resident Population:

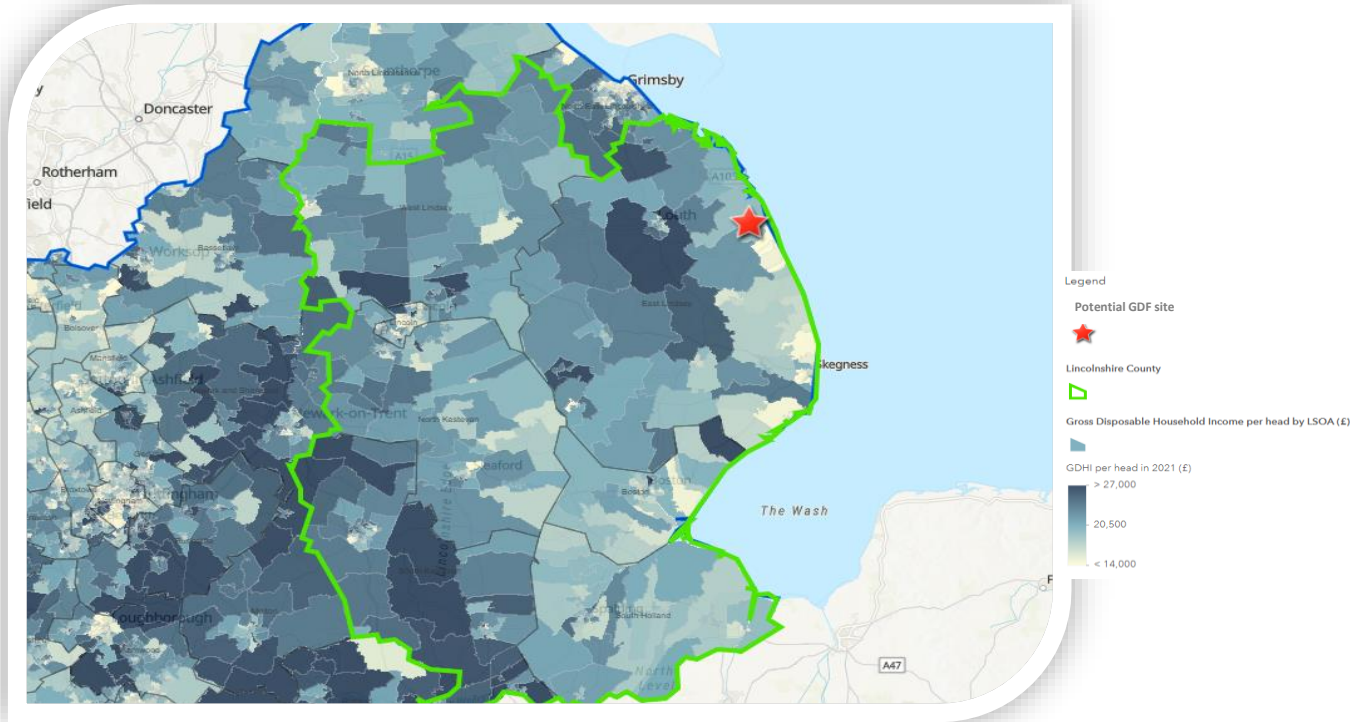


<sup>5</sup> 2023 population data for UK has not yet been released



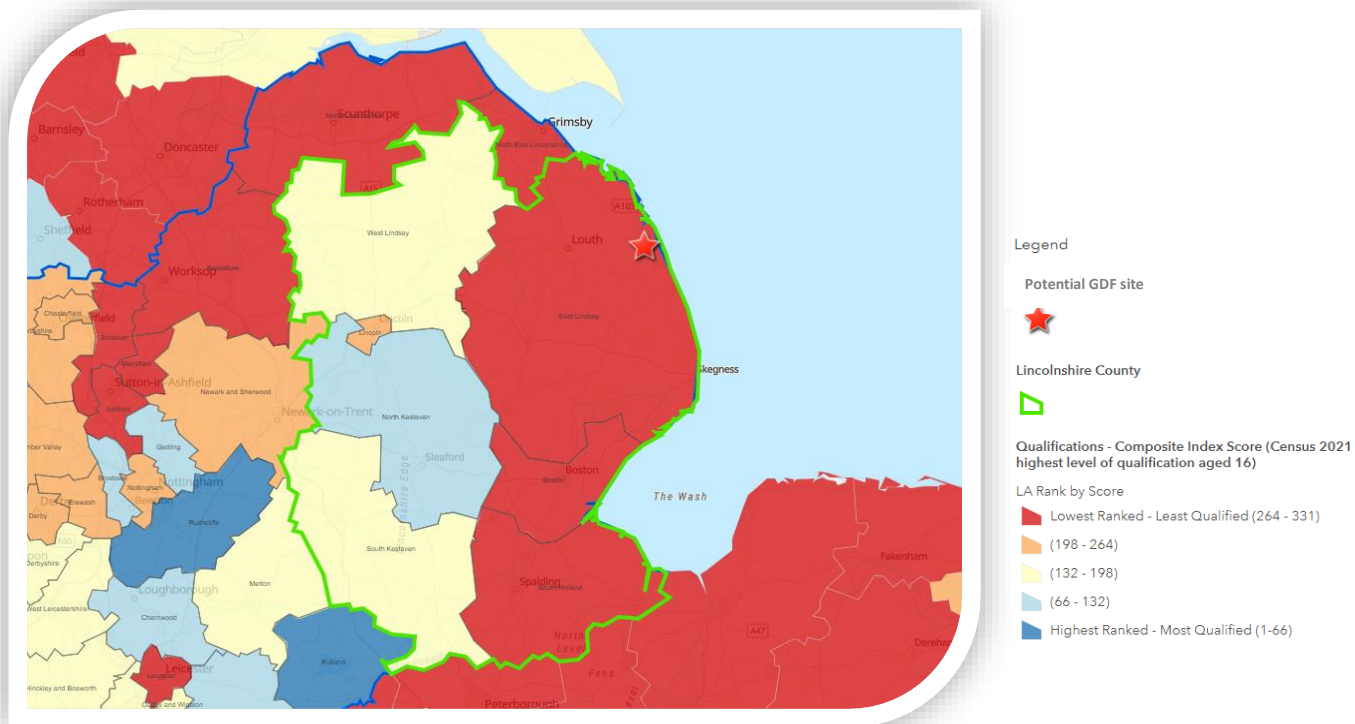
- According to data on gross disposable household income per head by Lower Super Output Area, **the potential GDF site and its surrounding areas fall within the lower range of Gross Domestic Household Income per head in Lincolnshire.** This suggests that residents in this area have less disposable income compared to those in many other parts of the county. The potential site location is situated in a predominantly rural area on the East Coast of Lincolnshire - the map below highlights the challenges of rural deprivation, where pockets of lower income exist even within a relatively prosperous county.

**Gross Disposable Household Income per head:**



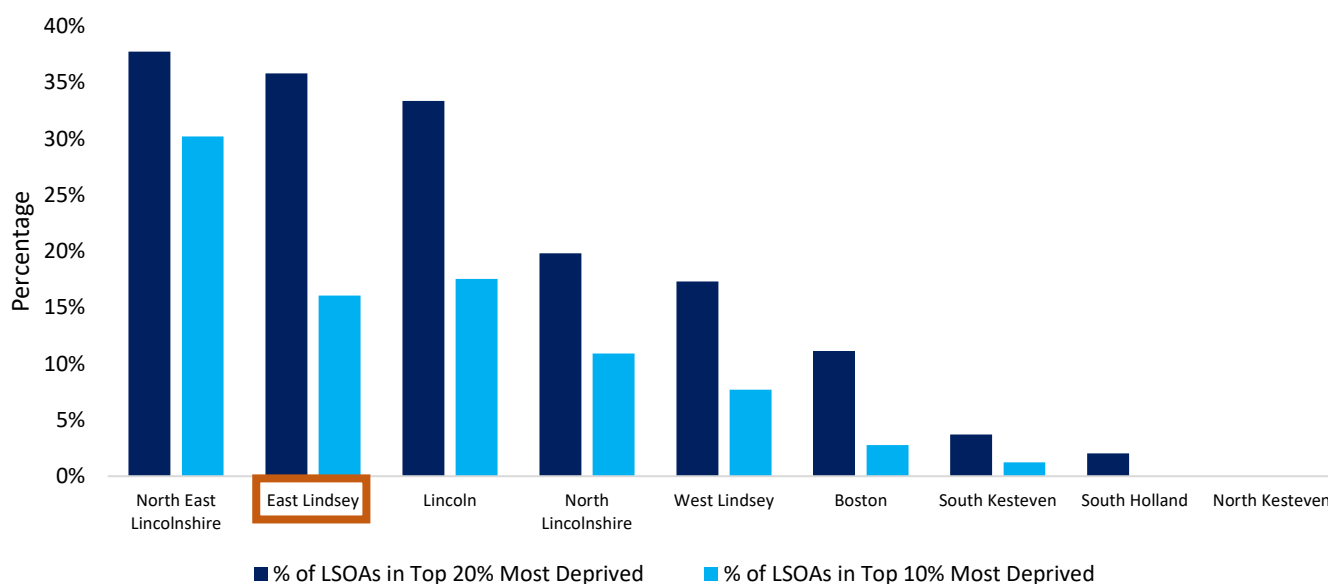
- **Data on qualifications levels show that East Lindsey generally shows lower skills levels compared to other areas in Lincolnshire.** Lower composite index score for skills compared to other parts of Lincolnshire suggests that the region faces challenges related to lower levels of educational attainment and skills within the workforce. This is discussed in detail later in this report.

## Qualifications - Composite Index Score (Skills):



- Relative to other areas within Greater Lincolnshire, **East Lindsey has a significant concentration of areas experiencing high levels of deprivation**. Specifically, 36% of East Lindsey's Lower Super Output Areas (LSOAs) fall within the most deprived 20% for Greater Lincolnshire, and 16% of East Lindsey's LSOAs fall within the most deprived 10% for Greater Lincolnshire<sup>6</sup>.

## Deprivation levels in Greater Lincolnshire CA:



<sup>6</sup> Ministry of Housing, Communities and Local Government English Indices of Deprivation, 2019

## 1.1.2 Population Forecasts

Baseline economic forecasting has been developed using the Midlands Oxford Economic Model (MOEM) comparing East Lindsey to its wider economic geography as a benchmark. The wider geography within this context considers scales of geography that East Lindsey is part of i.e., Greater Lincolnshire (Local Enterprise Partnership), East Midlands (Region), and the UK (National). Due to the format of the data and model available for forecasting purposes, the Greater Lincolnshire LEP area is used as a proxy for the Greater Lincolnshire Combined Authority.

It is crucial to acknowledge that several significant economic shifts such as the EU Exit, Covid-19, demographic changes and revision of datasets have occurred since the original baseline execution. Whilst the original OEM was initially much more optimistic, factoring in these shifts creates a more pessimistic outlook. Readers should interpret the findings with caution, recognising that while efforts have been made to capture these shifts, the model may not fully capture the current economic reality, particularly when forecasting over longer periods of time.

- Baseline population forecasts suggest that **the population of East Lindsey will reach 130,191 in 2050, this is set to be a decline of around 12,660** people compared to 2024, or -9% of the population, at an annual average decline of -0.3%.
- **Greater Lincolnshire’s population is set to decline by -3%** (+6 percentage points (pp) lower than East Lindsey), at an annualised average rate of -0.1 (+0.2 pp lower than East Lindsey).
- **East Midlands’ population is set to increase by +4%** (+13 pp higher than East Lindsey), at an annualised average growth of +0.2% (+0.5 pp higher than East Lindsey).
- **Nationally, the UK population is set to increase by 3%** (+12 pp higher than East Lindsey), at an annualised average growth rate of +0.1% (+0.4 pp higher than East Lindsey).

### Population forecasting:

		East Lindsey LA	Greater Lincolnshire LEP	East Midlands	UK
Population	2024	142,851	1,152,920	4,962,865	68,212,870
	2050	130,191	1,118,325	5,158,360	70,309,000
	Change	-12,660 (-9%)	-34,595 (-3%)	+195,495 (+4%)	+2,096,130 (+3%)

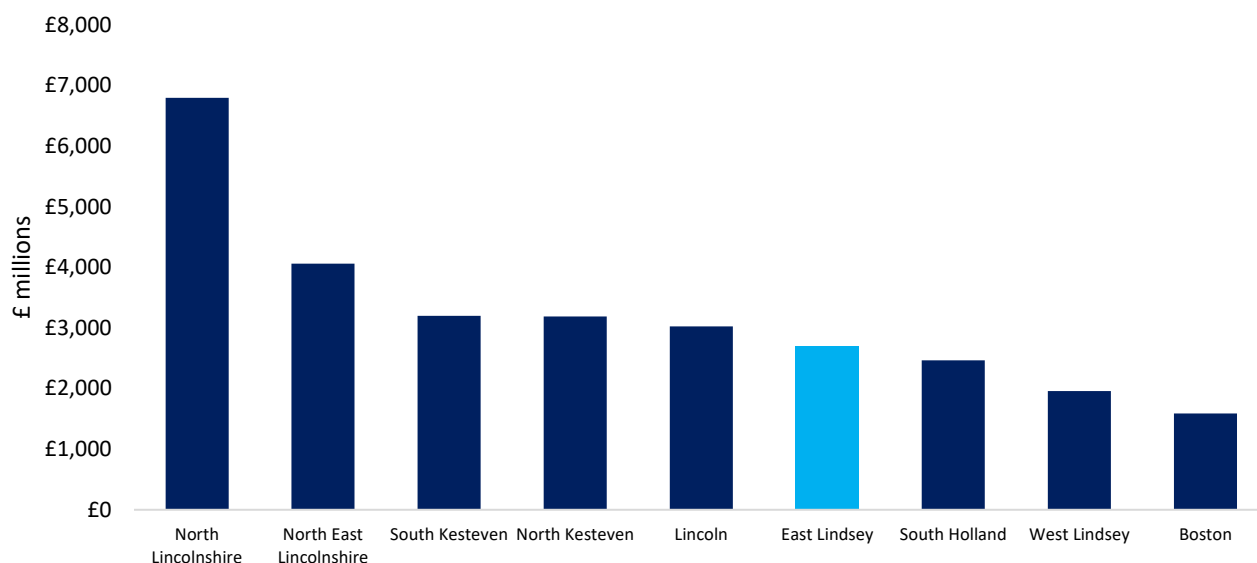
East Lindsey and Greater Lincolnshire are expected to experience population declines (-9% and -3%, respectively), contrasting with modest growth in the East Midlands (+4%) and the UK overall (+3%).

## 1.2 Regional Economy

### 1.2.1 Gross Value Added (GVA)

- With a **Gross Value Added (GVA) of £2.7 billion in 2022<sup>7</sup>**, East Lindsey's economic performance ranks 6th out of the nine local authorities in the Greater Lincolnshire Combined Authority Geography. This indicates that the district's economy is facing challenges and lags behind several of its regional counterparts. Also concerning is the **average GVA growth of 3% per year** from 1999 to 2022, underperforming both the Greater Lincolnshire CA and national average (both 4%). This points towards underlying structural issues hindering productivity and economic development.

#### GVA by Greater Lincolnshire Combined Authority local authorities (2022):

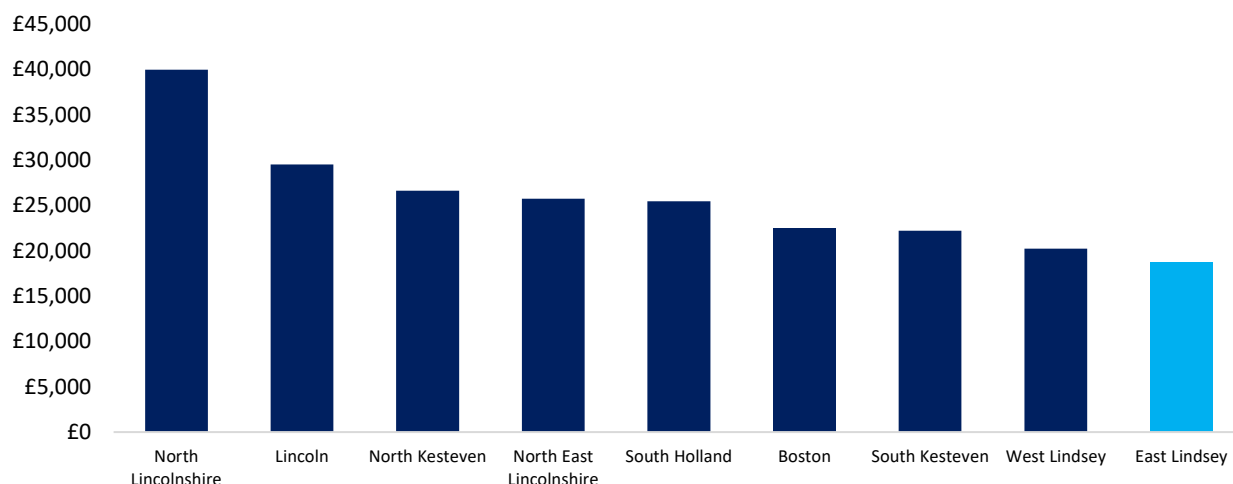


- With a **GVA per head of just over £18,000 in 2022**, East Lindsey lags significantly behind the combined authority (£26,000) and national level (£33,000)<sup>8</sup>. Concerningly, over the last quarter century the gap between East Lindsey and both the Greater Lincolnshire CA and national average has widened. This low productivity is likely linked to the skills gap and the dominance of lower-value-added sectors.
- **East Lindsey also has the lowest GVA per head among the districts in Greater Lincolnshire**, further highlighting structural challenges such as a reliance on lower value-added sectors and skills gaps which are discussed later in this report.

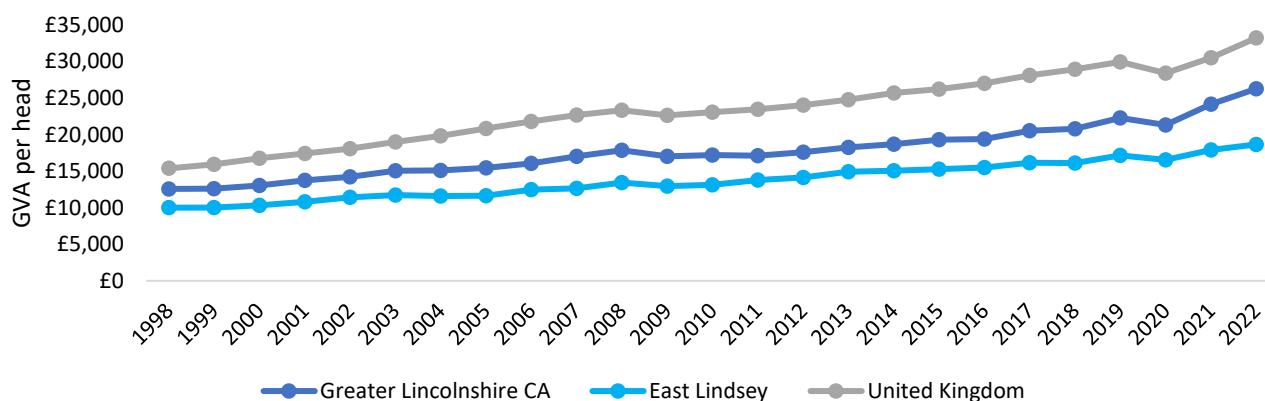
<sup>7</sup> ONS, Regional Gross Value Added (balanced) by industry: local authorities, April 2024

<sup>8</sup> ONS, Regional Gross Value Added (balanced) by industry: local authorities, April 2024

## GVA per head by Greater Lincolnshire Combined Authority local authorities (2022):



## GVA per head trends:



## 1.2.2 GVA Forecasts

- **East Lindsey's baseline economy is set to reach nearly £3bn Gross Value Added (GVA) by 2050**, an increase of £660m, or +29%, at an annual average growth rate of 0.9%.
- **East Lindsey is forecast to grow at a slower rate** compared to its wider geographies:
  - Greater Lincolnshire LEP area which is set to grow by +31% (+ 2 percentage points (pp) higher than East Lindsey) at an annualised average rate of 1% (+0.1 pp higher than East Lindsey).
  - East Midlands region which is set to grow by +39% (+10 pp higher than East Lindsey) at an annualised average rate of 1.2% (+0.3 pp higher than East Lindsey).
  - Nationally, the UK is set to grow by +47% (+18 pp higher than East Lindsey) at an annualised average rate of 1.4 (0.5 pp higher than East Lindsey).
- **East Lindsey's productivity is set to reach £22,849 GVA per head by 2050**, this is a forecast increase of +£6,646 GVA per head, equivalent to +41%, at an annualised average rate of +1.3%.
- **East Lindsey is forecast to have a lower GVA per head than its wider economic geography**, however it is set to have faster percentage growth:
  - Greater Lincolnshire LEP's GVA per head is forecast to reach £28,566 by 2050 (+£5,717 higher than East Lindsey), an increase of +35% (6 pp lower than East Lindsey), at an annualised average growth rate of 1.1% (0.2 pp lower than East Lindsey).

- East Midlands' GVA per head is forecast to reach £31,222 by 2050 (+£8,372 higher than East Lindsey), an increase of 35% (5 pp lower than East Lindsey), at an annualised average growth rate of 1.1% (0.2 pp lower than East Lindsey).
- Nationally, UK GVA per head is forecast to reach £42,410 by 2050 (+£19,560 higher than East Lindsey), an increase of +42% (1 pp higher than East Lindsey), at an annualised average growth rate of 1.3% (the same as East Lindsey).

### GVA Forecasting:

		East Lindsey LA	Greater Lincolnshire LEP	East Midlands	UK
Economy (£m GVA)	2024	£2,315	£24,370	£115,998	£2,034,817
	2050	£2,975	£31,946	£161,054	£2,981,784
	Change	+£660 (+29%)	+£7,576 (+31%)	£45,056 (+39%)	£946,967 (+47%)
Productivity (GVA per Head)	2024	£16,203	£21,138	£23,373	£29,830
	2050	£22,849	£28,566	£31,222	£42,410
	Change	+£6,646 (+41%)	+£7,428 (+35%)	+£7,849 (+34%)	+£12,579 (+42%)

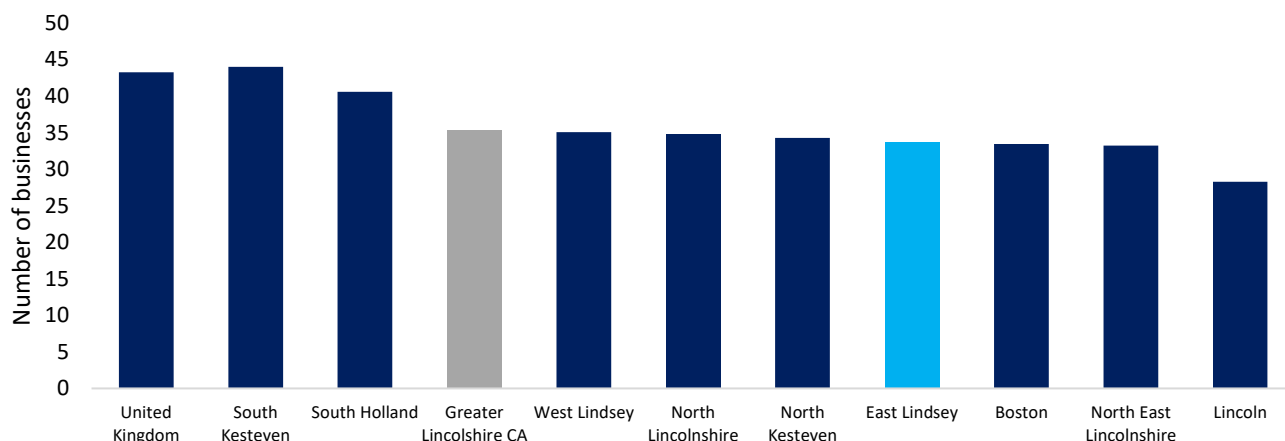
East Lindsey's GVA is set to grow by £660m (+29%) to nearly £3bn, with slower growth compared to Greater Lincolnshire, the East Midlands, and the UK. Productivity is forecast to rise by £6,646 (+41%) to £22,849 per head, with faster percentage growth than Greater Lincolnshire and the East Midlands

## 1.3 Enterprise and Infrastructure

### 1.3.1 Business Counts and Key Sectors

- Enterprise data shows a relatively low business density in East Lindsey, with a total of 4,860 businesses equating to 34 businesses per 1,000 residents in 2022<sup>9</sup>. In order to align with the national business density of 43 businesses per 1,000 residents, the business base in East Lindsey would need to increase by 1,277 businesses, or 26%. The dominance of micro-sized businesses (89% employing fewer than 10 people) indicates a lack of larger employers with the capacity to drive significant economic growth.

#### Business Counts per 1,000 residents by Local Authority (2022):



- Key sectors like the visitor economy, retail, energy, agriculture and agri-tech & manufacturing are vulnerable to economic downturns, technological disruptions and supply chain shocks. This emphasises the need for diversification and support for emerging sectors with higher growth potential.

#### Key Sectors in East Lindsey:

	East Lindsey Jobs Percentage of Total	England Jobs Percentage of Total	East Lindsey GVA Percentage of Total	UK GVA Percentage of Total	East Lindsey Enterprises Percentage of Total	UK Enterprises Percentage of Total
Visitor Economy	23.3%	10.2%	9.5%	4.5%	13.6%	9.1%
Retail	17.7%	14.0%	11.5%	10.4%	17.2%	14.6%
Healthcare & Life Sciences	11.1%	13.2%	5.2%	7.8%	2.9%	4.2%
Business, Professional & Financial Services	10.0%	23.5%	26.9%	35.9%	19.0%	32.4%
Public Sector inc. Education	10.0%	12.9%	13.8%	11.1%	2.4%	2.0%
Advanced Manufacturing	9.5%	7.5%	10.9%	9.4%	5.8%	4.9%
Construction	9.3%	7.2%	6.1%	6.9%	15.6%	15.9%
Transport Technologies & Logistics	3.5%	5.1%	2.2%	3.5%	3.0%	4.3%
Agriculture and Agri-Tech	3.4%	0.6%	9.5%	0.9%	18.0%	5.2%
Creative, Design & Digital	1.3%	4.8%	1.3%	6.5%	2.0%	6.9%
Energy & Low Carbon Activities	1.2%	1.1%	3.2%	3.0%	0.7%	0.6%

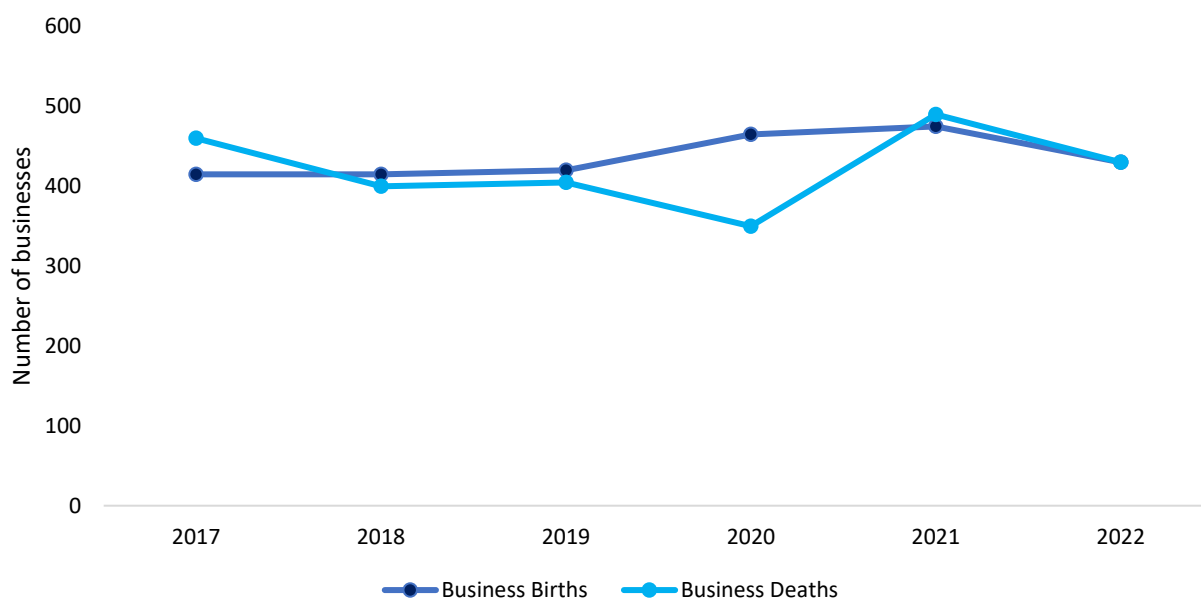
<sup>9</sup> ONS Business Demography, November 2023

East Lindsey shows a higher reliance on the Visitor Economy (23.3% of jobs, 9.5% of GVA) and Retail (17.7% of jobs, 11.5% of GVA), while sectors like Business, Professional & Financial Services and Creative Industries play a smaller role compared to England and the UK.

### 1.3.2 Business Births and Deaths

- Despite some fluctuations, **business births in East Lindsey have generally trended upwards from 2017 to 2022**. Although business births have increased modestly from 415 in 2017 to 430 in 2022, business deaths have declined from 460 to 430 during the same period, suggesting an overall expansion in business activity within the region<sup>10</sup>.
- **A dip in both births and deaths in 2020**, likely due to the pandemic, **was followed by a swift recovery**, indicating the resilience of the local business community.

#### Business Births and Deaths in East Lindsey (2017-2022):

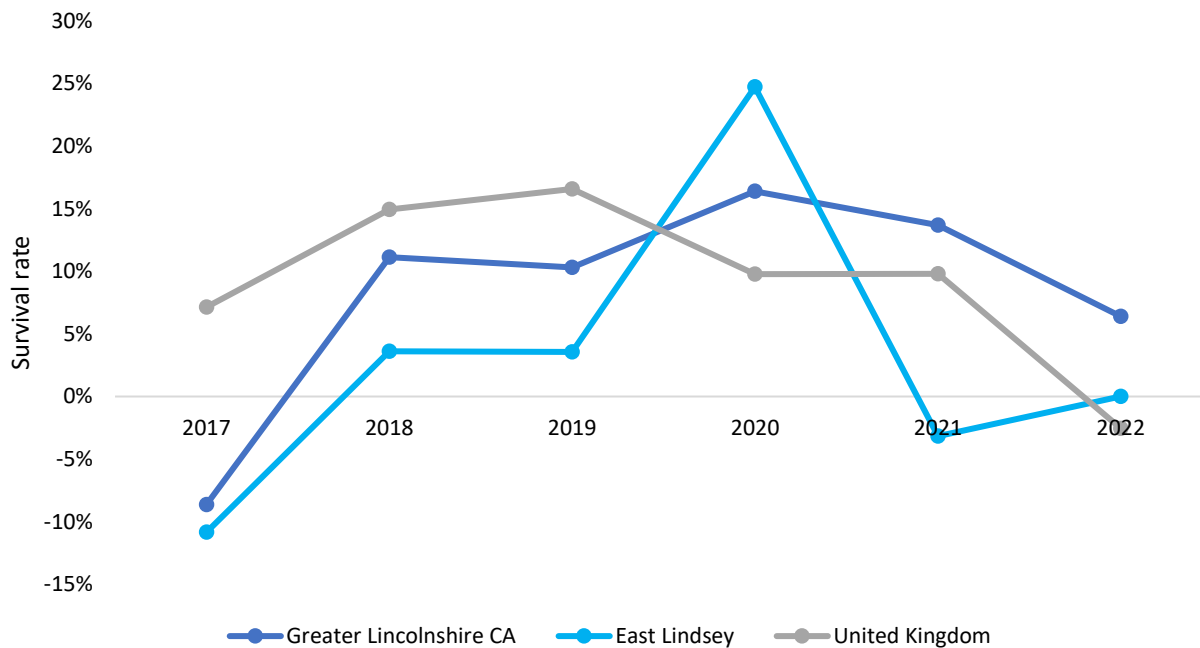


- **However, East Lindsey consistently underperforms compared to both the Greater Lincolnshire CA and UK in one-year business survival rates** (the difference between business births and deaths in a year). The impact of the Covid-19 pandemic in 2020/2021 appears to have been more severe in East Lindsey than in the Greater Lincolnshire CA and UK. While the UK survival rate remained consistent at 10%, and Greater Lincolnshire CA saw a drop of two percentage points, East Lindsey survival rates plummeted by 28 percentage points between 2020 and 2021, highlighting a heightened vulnerability of businesses in East Lindsey to external shocks.
- **Although all three geographies experienced fluctuations in survival rates, East Lindsey generally exhibits a more volatile trend.**

<sup>10</sup> ONS Business Demography, November 2023



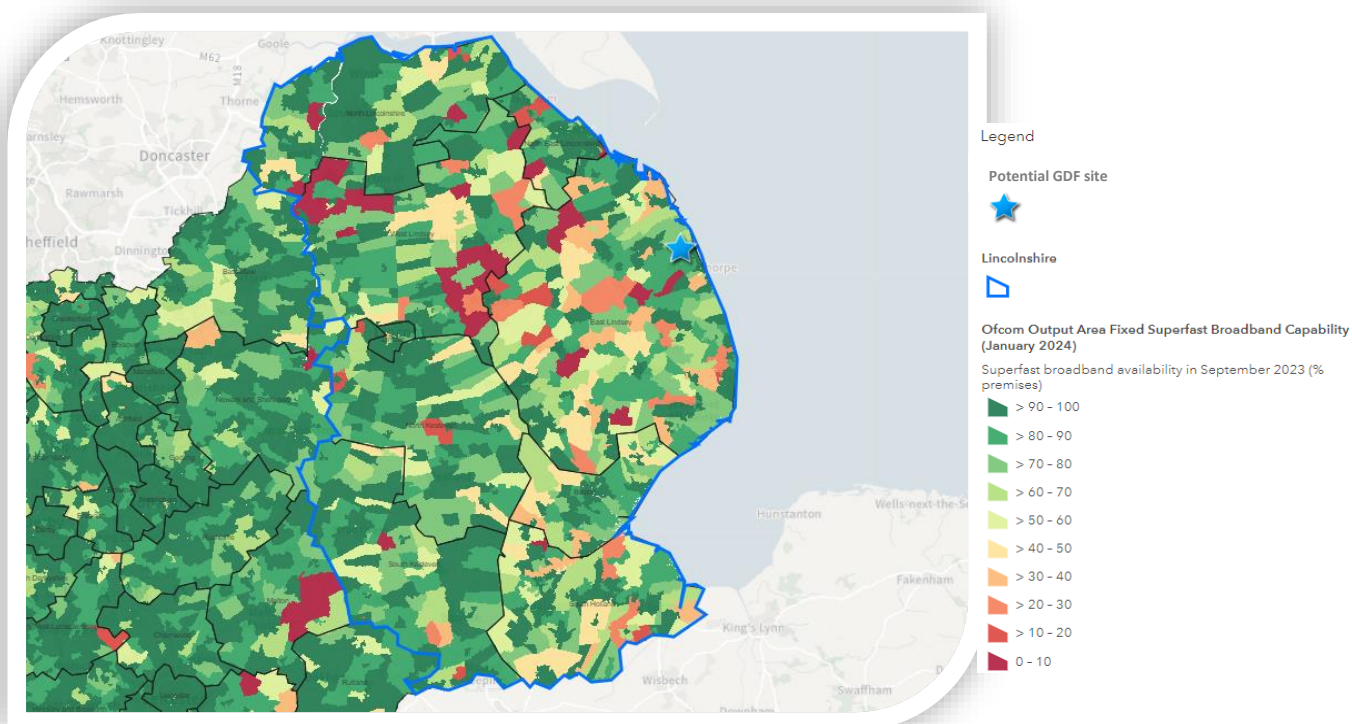
### Business Survival Rate (2017 – 2022):



### 1.3.3 Key Infrastructure Assets and Accessibility

- While East Lindsey has assets like its coastline and natural beauty that support tourism, it **suffers from poor transport links with many residents relying on private transport for commuting.**
- Information on digital infrastructure is limited, but **anecdotal evidence suggests challenges with broadband speed and reliability in rural areas**, which can impact businesses and residents alike.
- **While East Lindsey generally has better superfast broadband coverage compared to some other regions in Greater Lincolnshire, it still has areas with lower coverage that need improvement.**

## Ofcom Output Area Fixed Superfast Broadband Capability (2024):



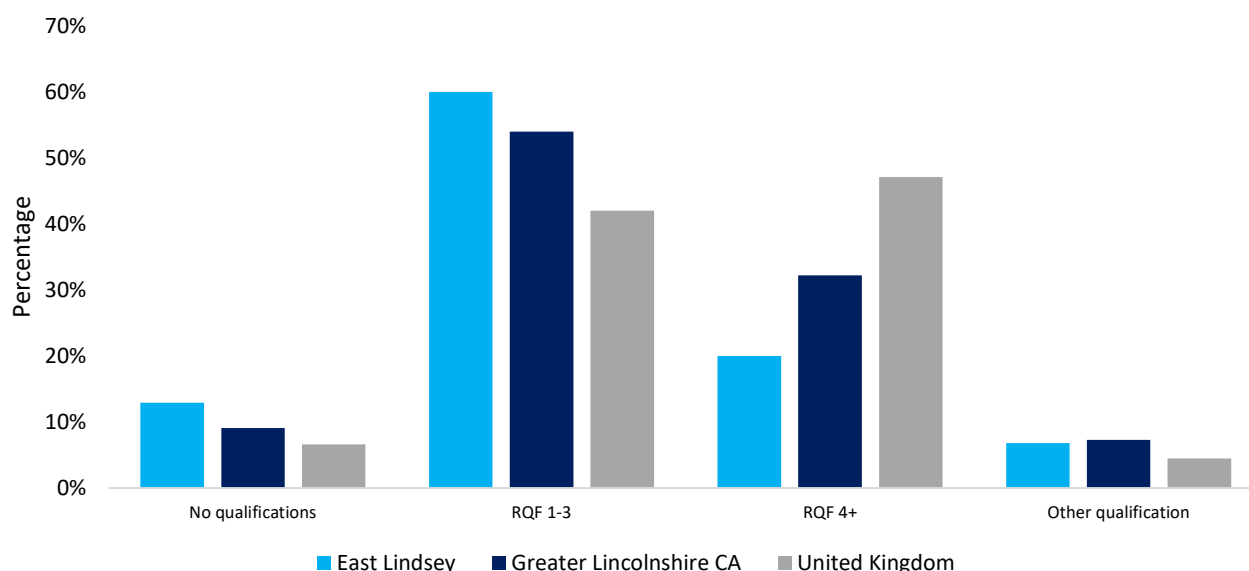
- **Key assets** in the district include:
  - Fairfield Enterprise Centre
  - Mablethorpe Business Centre
  - The Grimsby Institute Learning Centre
  - Sandilands Nature Reserve and Visitor Centre: acquired by the National Trust, with plans to develop it into an eco-friendly visitor hub.
- **East Lindsey is highly rural and contains no dual carriageways.**
- **The district's only modern railway line is the Poacher Line in the south of the district, which connects Skegness to Nottingham via Boston and Grantham.**
- **East Lindsey has 51 onshore wind turbines across various sites. There are also over 300 offshore wind turbines.**
- **East Lindsey is also in close proximity to three nationally approved offshore wind farm proposals:**
  - Hornsea Project 1 - this proposal includes up to 120 turbines
  - Hornsea Project 2 - this proposal includes up to 300 turbines
  - Triton Knoll
- **Key growth sectors** outlined by East Lindsey District Council include:
  - Agriculture and agri-tech
  - Manufacturing
  - Visitor Economy

## 1.4 Labour Market and Skills

### 1.4.1 Age and Skills

- Qualifications data reveals a concerning skills gap. **13% of the population of East Lindsey has no qualifications (compared to 7% nationally), and 60% of Regulated Qualifications Framework (RQFs) are at levels 1-3, indicating a concentration of 'blue collar' skills<sup>11</sup>.** East Lindsey has a lower proportion of the population possessing higher level skills with only 20% qualified at RQF4+, compared to 32% in the Greater Lincolnshire CA area and 47% at a national level. This poses a significant challenge for adapting to a changing economy that increasingly demands higher-level skills.
- **To eradicate the gap with the UK average, 2,954 of the working age East Lindsey residents are needed to obtain at least one qualification.** To eradicate the gap with the Greater Lincolnshire CA average, 4,431 of the working age East Lindsey residents are needed to obtain at least one qualification.
- **To eradicate the gap with the UK average, 19,980 of the working age East Lindsey residents are needed to obtain RQF4+.** To eradicate the gap with the Greater Lincolnshire CA average, 8,880 of the working age East Lindsey residents are needed to obtain RQF4+.

#### RQF qualification levels:



### 1.4.2 Employment Rate

- Despite recent gains, the region's employment rate continues to lag behind the national average. **Over the past 20 years, the region has experienced an average employment rate of 69%, compared to the national average of 73%<sup>12</sup>.** While East Lindsey's 2023 employment rate of 74% represents a high point since 2011, it remains below the current national rate of 76%.
- Further analysis of the Annual Population Survey occupational data reveals significant differences between East Lindsey, Greater Lincolnshire, and the national profile. Notably, **East Lindsey demonstrates a lower proportion of employment in 'Professional Occupations' (10%) compared to both Greater Lincolnshire (17%) and the national average (27%). Conversely, East Lindsey exhibits a higher concentration in 'Skilled Trade Occupations' (20%) relative to Greater Lincolnshire (13%) and the national average (9%).** This trend is further pronounced in 'Process, Plant and Machine Operatives,' where East Lindsey's 18% surpasses both Greater Lincolnshire (10%) and the national average (5%).

<sup>11</sup> ONS Annual Population Survey 2023

<sup>12</sup> ONS Annual Population Survey 2023

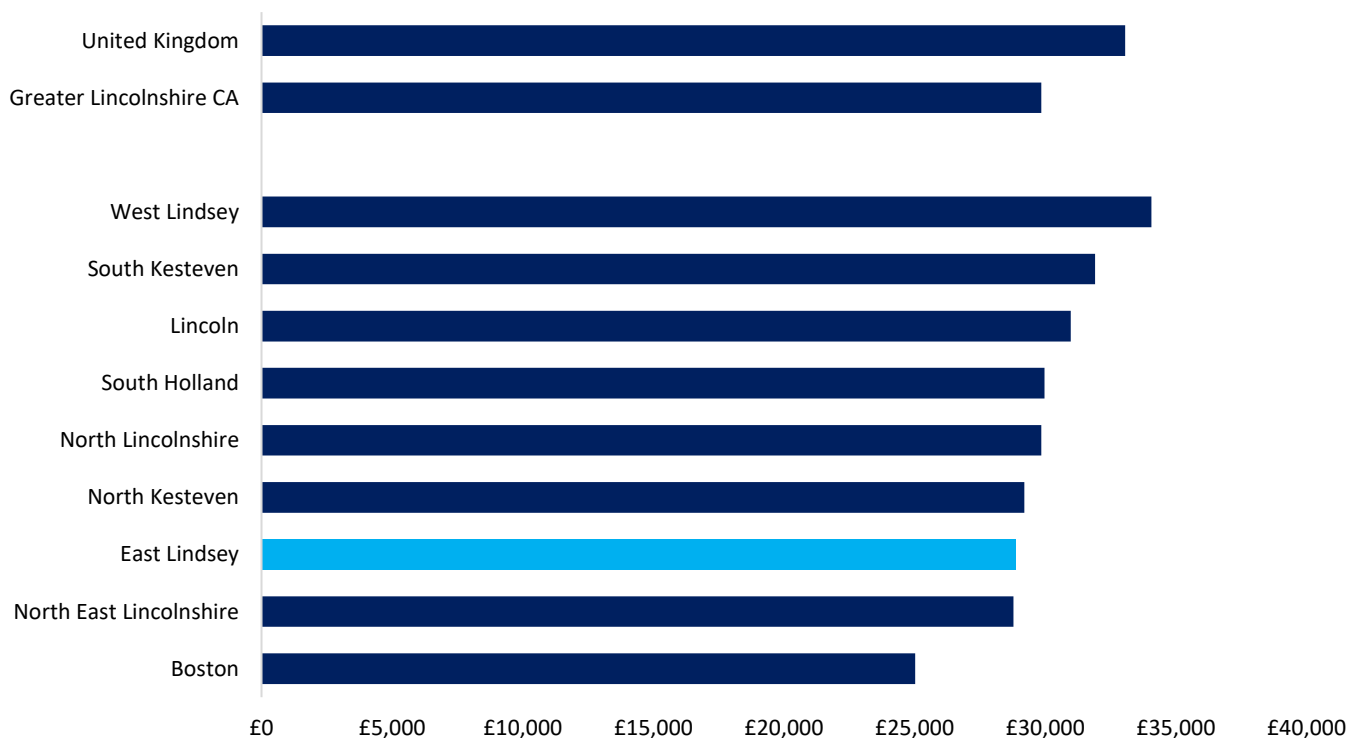
## Standard Occupational Classification:

	Managers, Directors and Senior Officials	Professional Occupations	Associate Professional Occupations	Administrative and Secretarial Occupations	Skilled Trades Occupations	Caring, Leisure and Other Service Occupations	Sales and Customer Service Occupations	Process, Plant and Machine Operatives	Elementary Occupations
East Lindsey	8%	10%	18%	11%	20%	4%	3%	18%	6%
Greater Lincolnshire CA	10%	17%	12%	9%	13%	9%	9%	11%	9%
United Kingdom	11%	27%	15%	10%	9%	8%	6%	5%	9%

Blue shading indicates a higher proportion compared to Greater Lincolnshire CA and United Kingdom, yellow shading indicates a lower proportion compared to Greater Lincolnshire CA and United Kingdom. East Lindsey has higher proportions in Skilled Trades (20%) and Process, Plant, and Machine Operatives (18%), but lower representation in Professional Occupations (10%) compared to Greater Lincolnshire (17%) and the UK (27%).

- The occupational data underscores East Lindsey's strength in traditional industries, particularly those requiring skilled trades and operative roles. However, the **lower proportion of 'Professional Occupations' compared to regional and national averages may indicate a need to attract and retain highly skilled professionals.**
- **Average earnings for full time workers in East Lindsey in 2022 were the third lowest in the Greater Lincolnshire region at £28,899**, almost £1,000 less than the Greater Lincolnshire CA average and over £4,000 less than the national average<sup>13</sup>.

## Average Earnings:

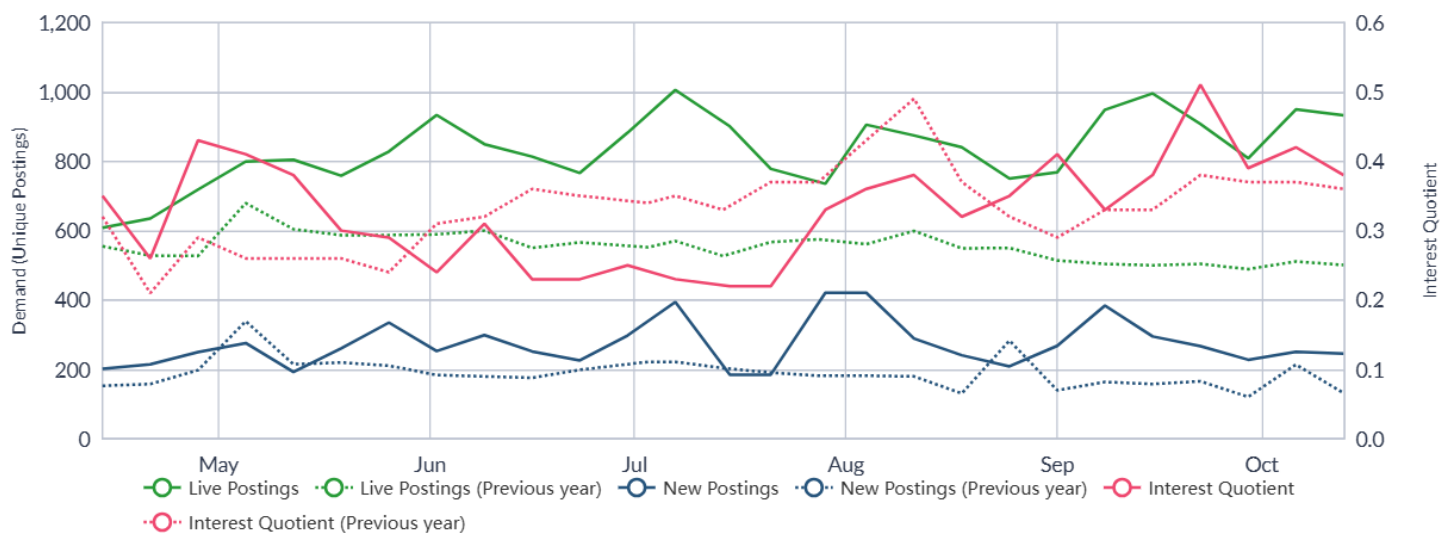


<sup>13</sup> ONS, Annual Survey of Hours and Earnings (ASHE), November 2023

### 1.4.3 Job Postings<sup>14</sup>

- **Between September 2023 and October 2024, a total of 11,743 unique job postings were recorded in East Lindsey.** This is an increase of 12.8% year-on-year whilst national job postings decreased 25.0% over the same period.
- **Positively, over the last six months in East Lindsey, unique job postings<sup>15</sup>, new postings and the interest quotient<sup>16</sup> are all above the corresponding period last year** suggesting demand from employers has heightened and also local people are actively seeking new opportunities.

#### Job postings and Interest Quotient:



- **The average job posting duration in East Lindsey is 29 days** compared to 28 days nationally. Shorter durations may indicate high demand for talent, while longer durations can reflect a slower hiring process or a shortage of suitable candidates.

#### Job Posting Duration:



- In contrast to the national profile, where most job postings are permanent and full-time, **over half of the roles (where specified) in East Lindsey are contract positions**, though the majority are full-time. Additionally, the vast majority of job postings in East Lindsey (92%) are classified as 'not remote,' with only 2% fully remote and 6% offering hybrid working options.

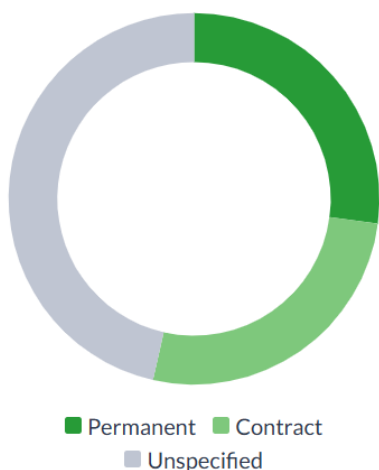
<sup>14</sup> All data in this section is derived from the Adzuna Analyst Portal October 2024.

<sup>15</sup> A Unique Job Posting refers to a distinct job advertisement listed on the Adzuna platform, representing a single employment opportunity. Duplicate postings, often found across multiple job boards or recruiters, are consolidated by Adzuna using advanced data aggregation techniques to ensure each posting reflects a unique job vacancy.

<sup>16</sup> Interest quotient (IQ) is a metric that uses jobseeker data from the Adzuna website to quantify the level of jobseeker interest in roles for specific occupations, roles within specific industries, or roles requesting specific skills, all within a given location and time period. This metric provides a proxy for talent supply to complement market demand data. While there is no benchmark score, the higher the number, the more interest in a role. Essentially, the IQ shows how popular certain job roles or skills are among jobseekers in a specific area and time (in this case in East Lindsey from September 2023 to October 2024), helping to identify where talent supply might be stronger or weaker.

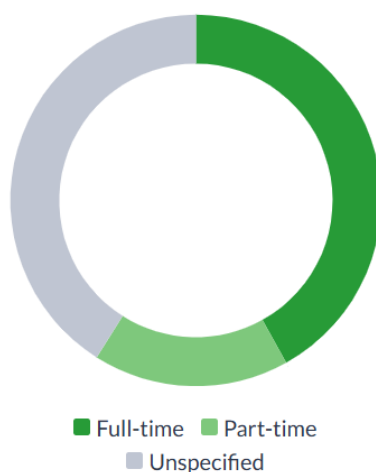
### Permanent vs Contract

Demand breakdown by contract type



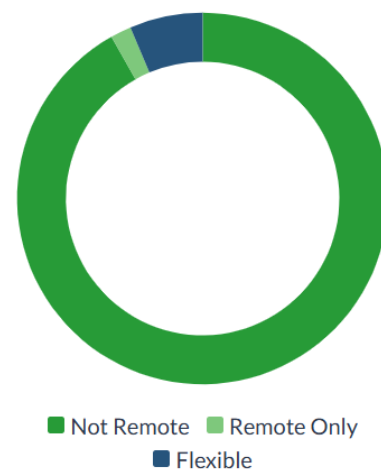
### Full-time vs Part-time

Demand breakdown by contract hours



### On-site vs Remote

Demand breakdown by workplace model



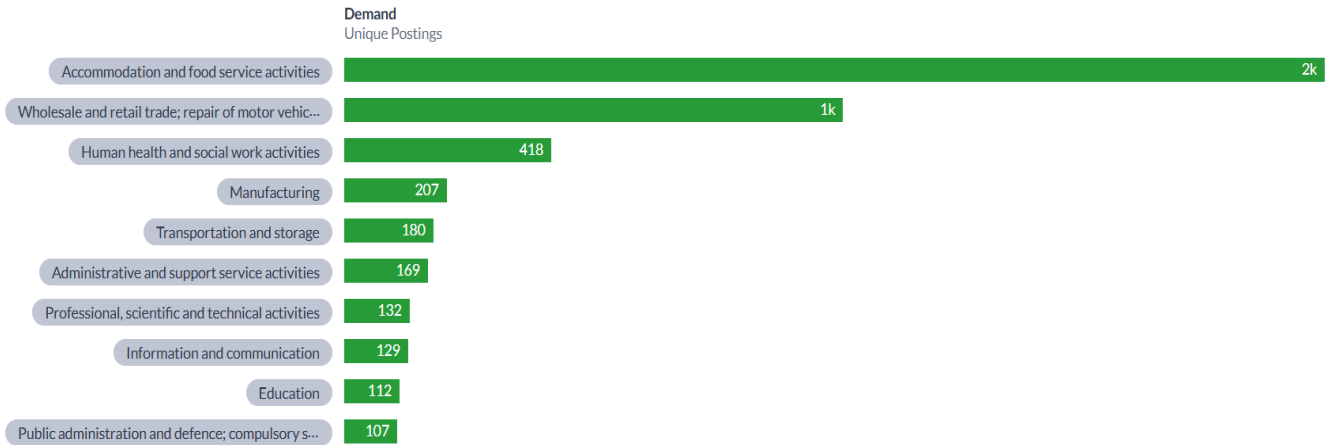
- **The most prevalent employer over the time period analysed was Butlins with 1,466 job postings.** These postings accounted for 12.5% of all job postings over the period. Haven Holidays and Parkdean Resorts also appeared in the Top 10 list of employers hiring, suggesting a particular demand for employees in the accommodation and food services industry.

### Top 10 Employers Hiring:

Employer	Industry SIC 2007	Demand Unique Postings
Butlins	Accommodation and food service activities	1,466
Stannah	Wholesale and retail trade; repair of motor v...	233
Haven Holidays	Accommodation and food service activities	228
Tesco	Wholesale and retail trade; repair of motor v...	215
BAE Systems	Manufacturing	203
Prime Life	Human health and social work activities	125
HCRG Care Group	Human health and social work activities	104
Parkdean Resorts	Accommodation and food service activities	89
Hillarys Blinds	Wholesale and retail trade; repair of motor v...	84
David Ross Education Trust	Education	74

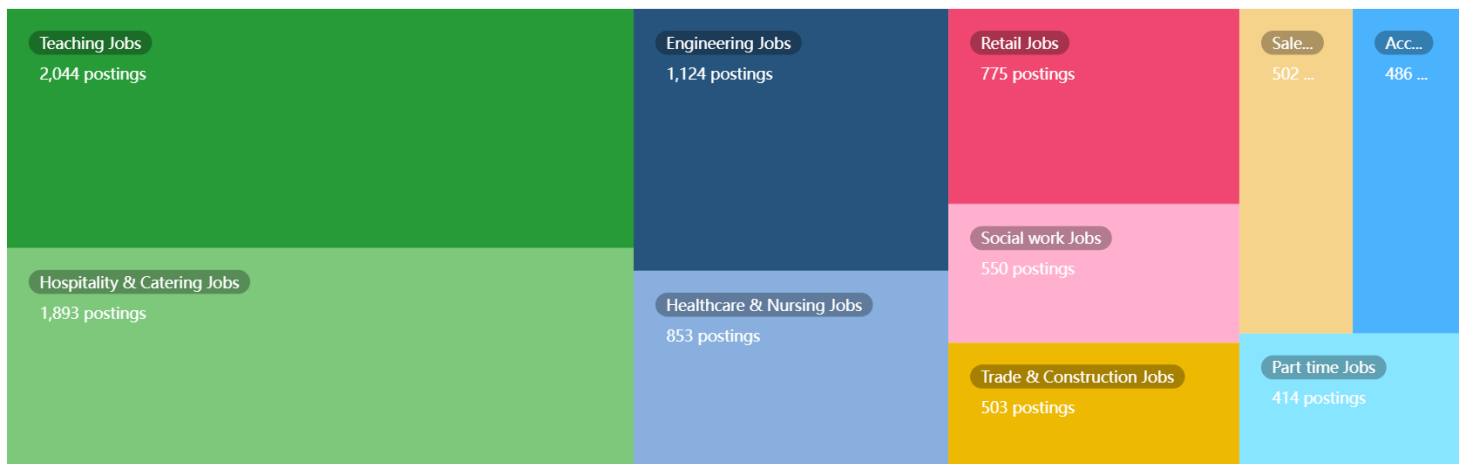
- Reflecting the top 10 employers hiring, **the highest number of job postings were from the 'Accommodation and food services activities' sector.**

## Top Industries Hiring:



- In terms of the professions with the highest number of postings, **teachers and associated roles in education settings accounted for 17.4% of all postings**. This was followed by hospitality and catering roles (16.1%) and engineering jobs (9.5%).

## Hiring by Occupation:



- The table below identifies the top 10 most in-demand occupations (by number of postings) over the last 12 months in East Lindsey. The list includes the average advertised salary, the location quotient<sup>17</sup> and the interest quotient.

<sup>17</sup> The Location Quotient (LQ) is a simple ratio used to determine the concentration or dominance of a particular industry in a region (i.e., East Lindsey) in comparison to a larger reference region (UK). Anything above 1 suggests a strength.

## Top occupations in demand in East Lindsey:

Top occupations in demand in East Lindsey

Occupation	Median Salary per year	Demand Unique Postings	Location Quotient	Interest Quotient
Primary School Teach...	£35,653	403	3.7	21.0
Teaching Assista...	£20,871	391	2.8	34.4
Ch...	£23,040	221	2.9	21.2
Social Care Work...	£22,723	199	1.9	29.3
Clean...	£21,964	166	2.5	35.8
Sous Ch...	£25,212	158	2.4	9.5
Manag...	£37,687	152	0.8	18.3
Lift/Escalator Engine...	Not available	145	17.5	1.8
Sales Assista...	£19,200	138	2.5	22.9
Teach...	£34,800	129	2.3	5.0

- The most prevalent qualification level requested by employers in East Lindsey is RQF Level 3 (46.2% of all job postings). This is comparable to A Levels.
- In addition, **41.1% of job postings request higher level qualifications (RQF Level 4 and above)**. However, as stated earlier only 20% of the population holds qualifications at RQF Level 4+, indicating a significant shortage of individuals with the qualifications employers seek.

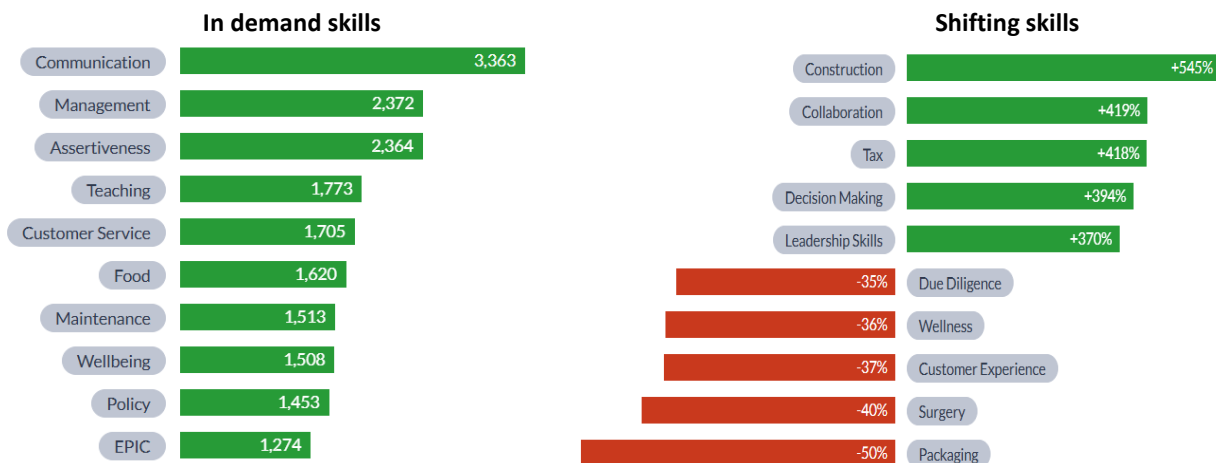
## Minimum Requested Education:



- The charts below identify the key skills most frequently requested by employers and the emerging skills that are gaining prominence in the East Lindsey job market, reflecting evolving workforce needs.



## In Demand and Shifting Skills<sup>18</sup>:



- **The median advertised salary over the period analysed was £30,215, which is 8.6% lower than the national average.**
- **The advertised salary in East Lindsey has increased by 13.5% in the last year compared to 6.8% nationally.** This is perhaps indicative of local businesses needing to increase compensation levels in response to demand and industry-specific factors.



<sup>18</sup> 'Shifting Skills' identifies and analyses changes in employer demand for specific skills over time (in this case from September 2023 to October 2024), highlighting emerging trends and evolving requirements in the job market

### 1.4.4 Jobs Forecasts

- **East Lindsey’s baseline jobs forecast is set to reach 54,524 people in employment by 2050**, a forecasted decrease of around 1,294 jobs, or -2%, at an annual average decline rate of -0.1%.
- **In context to its wider economic geography, East Lindsey’s job growth is set to decline:**
  - Greater Lincolnshire LEP’s employment is set to decrease by -3% (-1 percentage points (pp) lower than East Lindsey), at an annualised average rate of -0.1% (equal to East Lindsey).
  - East Midlands employment is set to increase by +4% (+6 pp higher than East Lindsey) at an annualised average growth rate of +0.1% (0.2 pp higher than East Lindsey).
  - Nationally, UK employment is set to grow by +8% (+10 pp higher than East Lindsey).

		East Lindsey LA	Greater Lincolnshire LEP	East Midlands	UK
<b>Jobs</b>	<b>2024</b>	55,818	528,158	2,460,275	36,483,050
	<b>2050</b>	54,524	514,019	2,570,390	39,295,930
	<b>Change</b>	-1,294 (-2%)	-14,139 (-3%)	+110,115 (+4%)	+2,812,880 (+8%)

*East Lindsey and Greater Lincolnshire are expected to see job declines of -2% and -3%, respectively, while the East Midlands (+4%) and the UK (+8%) are forecast to experience job growth.*

## 2. Economic Impact Assessment

The Midlands Oxford Economic Forecasting model, an input-output model, has been deployed to model the following forecasting scenarios. The model has been developed by Oxford Economics, and used by the Midlands Engine Observatory, to provide robust, evidence-based forecasts and simulations for global, national and regional economies. The model integrates extensive datasets to offer insights into economic performance across multiple measures.

This chapter compares the baseline 'do nothing' scenario with three different scenarios based on a Geological Disposal Facility (GDF) being built and varying levels of job 'leakage' in East Lindsey. These leakage levels are high, medium and low and are outlined in detail below. The baseline scenario compares 2024 baseline levels to both 2044 and 2050 forecasts if a GDF was to be established, where job 'leakage' refers to the spillover of local jobs elsewhere, i.e., employment shifts outside of East Lindsey to elsewhere within the UK.

In the context of this report, 'job leakage' refers to the proportion of jobs associated with a Geological Disposal Facility (GDF) that are not filled by local workers but instead by external specialists from outside the immediate search area. This also includes work completed outside the local area when the necessary skills or roles are unavailable within the local labour market, leading to workforce spillover into the wider supply chain.

For example, if a GDF employs 100 workers with a 30% leakage rate, 70% of the workforce would be drawn locally, while 30% would be sourced externally or performed outside the region.

Below is an economic forecast of an impact assessment (including multiplier effects) to the economy of East Lindsey if a GDF was to be located in the region. The forecast is cumulative and includes employment across three distinct tranches:

- **Site Characterisation** (assumed for this exercise to take place over 14 years between 2030-2044)
- **Construction** (assumed for this exercise to take place over 5 years<sup>19</sup> between 2044-2049)
- **Operations** (assumed for this exercise to take place over 1 year between 2049-2050; however, the assumed operation for a GDF would be a period of 140 years)

All three tranches include roles such as Architectural and Engineering Activities; Technical Testing and Analysis; Scientific Research and Development; Construction; Civil Engineering; Warehousing and Logistics; and Administration as identified in Nuclear Waste Services' (NWS) 2022 report, 'Update to the GDF Workforce and Skills Requirements'. More specifically, and given the appropriate consent and permits, **job functions throughout these tranches, will include activities such as construction of the facility, drilling, geological surveys and analysis, project and programme management, and transportation to the GDF once the necessary infrastructure has been completed.**

**A GDF in East Lindsey would not include any 'nuclear activity'** such as the processing of any nuclear materials, as all nuclear materials will be treated elsewhere in the UK. The role of the facility is to safely and permanently dispose of packaged nuclear waste, allowing it to decay over time. Current assumptions are that the underground facilities are located inshore up to 1000m under the seabed, up to a maximum of 20km horizontally from the surface facilities.

Excluding workforce leakage, and as per the 'Update to the GDF Workforce and Skills Requirements' report, a GDF is currently forecast to require a total of 3,961 average annual Full-Time-Equivalent (FTE) jobs generated by direct employment during the implementation of a GDF, with this figure applying at a national level. More specifically, this includes 1,969 jobs during Site Characterisation, 1,294 during Initial Construction, and 698 during Operations.

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<sup>19</sup> For the purposes of this exercise, construction is assumed to take place over a 5-year period. However, broader NWS forecasts suggest this phase will span 10 years. The timeline was compressed to fit within the Midlands Oxford Economic Forecasting Model, which only projects to 2050, allowing the potential impact of a GDF during the Operations phase to be represented.

## 2.1 Initial Impacts (Site Characterisation; 2024-2044)

This section explores the impacts of the Site Characterisation tranche across all three scenarios, providing analysis of what the programme can deliver near term up to 2044. Here it's important to note that Site Characterisation is the tranche most likely to experience job leakage as the phase involves highly specialised preparatory roles, such as geological surveying. These roles are typically not available within a GDF search area, requiring temporary specialists to be brought in as external contractors from outside the region hence the most varied levels of job leakage.

At first glance, the headline impacts may seem negligible upon the tranche's completion in the short term. However, when compared to the longer-term outlook for 2050, as explored in [Section 2.2](#), it becomes clear that local employment impacts are likely to accumulate, producing more significant economic benefits over time. It is also important to not overlook the immediate short-term benefits, such as job creation and business opportunities, which underscore the tranche's importance.

The following table outlines scenario assumptions that have been made whilst developing the forecasting analysis for this section of the report:

**Table 1. Scenario Assumptions**

Scenario	Tranche
	Site Characterisation
Scenario 1: 'Baseline'	'Do Nothing' scenario; expected trajectory of economic activity without the development of a GDF facility, a business-as-usual approach based on past economic trends with no intervention.
Scenario 2: 'High Leakage'	95% leakage; 5% role retention
Scenario 3: 'Medium Leakage'	80% leakage; 20% role retention
Scenario 4: 'Low Leakage'	65% leakage; 35% role retention

The headline impacts from the analysis are highlighted below:

### Scenario 2: 'High Leakage'

- **The Gross Value Added (GVA) for East Lindsey is projected to increase to £2,834m**, representing a growth of £17m compared to the baseline.
- **Jobs in East Lindsey are forecast to a cumulative total of 55,996 jobs**, 304 more than the baseline, in contrast to the trend of declining job numbers seen in the baseline, leading to an increase in employment opportunities.
- **The International Labour Organization (ILO) unemployment rate would potentially drop to 4.2%**, representing an improvement of 0.6 percentage points (pp) compared to the baseline.
- **The population is projected to decline to 134,421**, a decrease of 290 people compared to the baseline, suggesting the potential for population growth driven by economic opportunities tied to the GDF development.
- **Productivity per person could rise to £21,008**, an improvement of £78 over the baseline, but still below Greater Lincolnshire, East Midlands and UK forecasts.

### Scenario 3: 'Medium Leakage'

- **The Gross Value Added (GVA) for East Lindsey is projected to increase to £2,846m**, representing a growth of £29m compared to the baseline.
- **Jobs in East Lindsey are forecast to a cumulative total of 56,203 jobs**, 510 more than the baseline, in contrast to the trend of declining job numbers seen in the baseline, leading to an increase in employment opportunities.
- **The ILO unemployment rate would potentially drop to 4.1%**, representing an improvement of 0.7pp compared to the baseline.
- **The population is projected to decline to 134,391**, a decrease of 260 people compared to the baseline, suggesting the potential for population growth driven by economic opportunities tied to the GDF development.
- **Productivity per person could rise to £21,179**, an improvement of £171 over the baseline, but still below Greater Lincolnshire, East Midlands and UK forecasts.

#### Scenario 4: 'Low Leakage'

- **The Gross Value Added (GVA) for East Lindsey is projected to increase to £2,858m**, representing a growth of £40m compared to the baseline.
- **Jobs in East Lindsey are forecast to a cumulative total of 56,410 jobs**, 718 more than the baseline, in contrast to the trend of declining job numbers seen in the baseline, leading to an increase in employment opportunities.
- **The ILO unemployment rate would potentially drop to 4.0%**, representing an improvement of 0.8pp compared to the baseline.
- **The population is projected to decline to 134,361**, a decrease of 230 people compared to the baseline, suggesting the potential for population growth driven by economic opportunities tied to the GDF development.
- **Productivity per person could rise to £21,273**, an improvement of £265 over the baseline, but still below Greater Lincolnshire, East Midlands and UK forecasts.

The below tables set out the distinct scenarios, as highlighted in Table 1, alongside broader comparisons of East Lindsey within the context of the wider region across a series of metrics. Wider geographies are included to provide a greater economic context, these are Greater Lincolnshire (LEP geography, serving as a proxy for the future Greater Lincolnshire Combined County Authority), the East Midlands (region), and the UK (national).

#### East Lindsey Economy Summary Table – GVA (£m)

Modelling Scenario	2024 Figures	2044 Forecast	Difference
Scenario 1: 'Baseline'	2,315	2,818	+503
Scenario 2: 'High Leakage'	2,315	2,834	+520
Scenario 3: 'Medium Leakage'	2,315	2,846	+532
Scenario 4: 'Low Leakage'	2,315	2,858	+544
Context: Greater Lincolnshire	24,370	30,098	+5,728
Context: East Midlands	115,998	149,547	+33,549
Context: UK	2,034,817	2,733,299	+698,482

GVA increases range from £503m in the 'Baseline' scenario to £544m in 'Low Leakage,' compared to £5.7bn for Greater Lincolnshire, £33.5bn for the East Midlands, and £698.5bn for the UK.

#### East Lindsey Economy Summary Table - Cumulative Jobs

Modelling Scenario	2024 Figures	2044 Forecast	Difference
Scenario 1: 'Baseline'	55,818	54,524	-125
Scenario 2: 'High Leakage'	55,818	56,636	+178
Scenario 3: 'Medium Leakage'	55,818	56,843	+385
Scenario 4: 'Low Leakage'	55,818	57,051	+592
Context: Greater Lincolnshire	528,158	514,019	-4,098
Context: East Midlands	2,460,275	2,570,390	+114,187
Context: UK	36,483,050	39,295,930	+2,648,890

Jobs range from a decrease of 125 in the 'Baseline' scenario to an increase of 592 in 'Low Leakage.' In comparison, Greater Lincolnshire sees a loss of 4,098 jobs, while the East Midlands and UK gain 114,187 and 2.6 million jobs, respectively.

#### East Lindsey Economy Summary Table – ILO Unemployment Rate (%)

Modelling Scenario	2024 Figures	2044 Forecast	Difference
Scenario 1: 'Baseline'	6.2	4.8	-1.4 pp
Scenario 2: 'High Leakage'	6.2	4.2	-2.0 pp
Scenario 3: 'Medium Leakage'	6.2	4.1	-2.1 pp
Scenario 4: 'Low Leakage'	6.2	4.0	-2.2 pp
Context: Greater Lincolnshire	3.8	3.7	-0.1 pp
Context: East Midlands	3.8	3.3	-0.5 pp
Context: UK	4.6	3.8	-0.8 pp

Unemployment decreases from 6.2% to 4.8% in the 'Baseline' scenario and as low as 4.0% in 'Low Leakage.' Comparatively, Greater Lincolnshire sees a marginal decline (-0.1 pp), while the East Midlands and UK decrease by 0.5 pp and 0.8 pp, respectively.

### East Lindsey Economy Summary Table – Population

Modelling Scenario	2024 Figures	2044 Forecast	Difference
Scenario 1: 'Baseline'	142,851	134,131	-8,720
Scenario 2: 'High Leakage'	142,851	134,421	-8,430
Scenario 3: 'Medium Leakage'	142,851	134,391	-8,460
Scenario 4: 'Low Leakage'	142,851	134,361	-8,490
Context: Greater Lincolnshire	1,152,920	1,133,066	-19,854
Context: East Midlands	4,962,865	5,135,355	+172,490
Context: UK	68,212,870	70,099,190	+1,886,320

Population declines across all scenarios, ranging from -8,720 in the 'Baseline' to -8,430 in 'High Leakage.' In contrast, Greater Lincolnshire also declines (-19,854), while the East Midlands and UK populations grow by 172,490 and 1.9 million, respectively.

### East Lindsey Economy Summary Table – Productivity (GVA per Head)

Modelling Scenario	2024 Figures	2044 Forecast	Difference
Scenario 1: 'Baseline'	£16,203	£21,008	+£4,805
Scenario 2: 'High Leakage'	£16,203	£21,086	+£4,883
Scenario 3: 'Medium Leakage'	£16,203	£21,179	+£4,976
Scenario 4: 'Low Leakage'	£16,203	£21,273	+£5,070
Context: Greater Lincolnshire	£21,138	£26,563	+£5,425
Context: East Midlands	£23,373	£29,121	+£5,748
Context: UK	£29,830	£38,992	+£9,162

GVA per head rises from £16,203 to between £21,008 ('Baseline') and £21,273 ('Low Leakage'), with gains slightly below those in Greater Lincolnshire (+£5,425), the East Midlands (+£5,748), and the UK (+£9,162).

## 2.1.1 Population

- East Lindsey’s baseline population forecast suggests that the **population will reach 134,131 by 2044**, this is set to be a decline of around 8,720 people, or -6.1% of the population, at an annual average decline of -0.3%.
- In contrast to the baseline, if a GDF facility were to be built in East Lindsey, three different population growth scenarios can be forecast based on scenarios outlined in Table 1 earlier:

- **Scenario 2: ‘High Leakage’**

In this scenario the population is forecast to reach **134,421 by 2044**, a decline of 8,430 people, or -5.9% of the population (0.2 percentage points (pp) lower than the baseline), at an annual average decline of -0.3% (on par with the baseline).

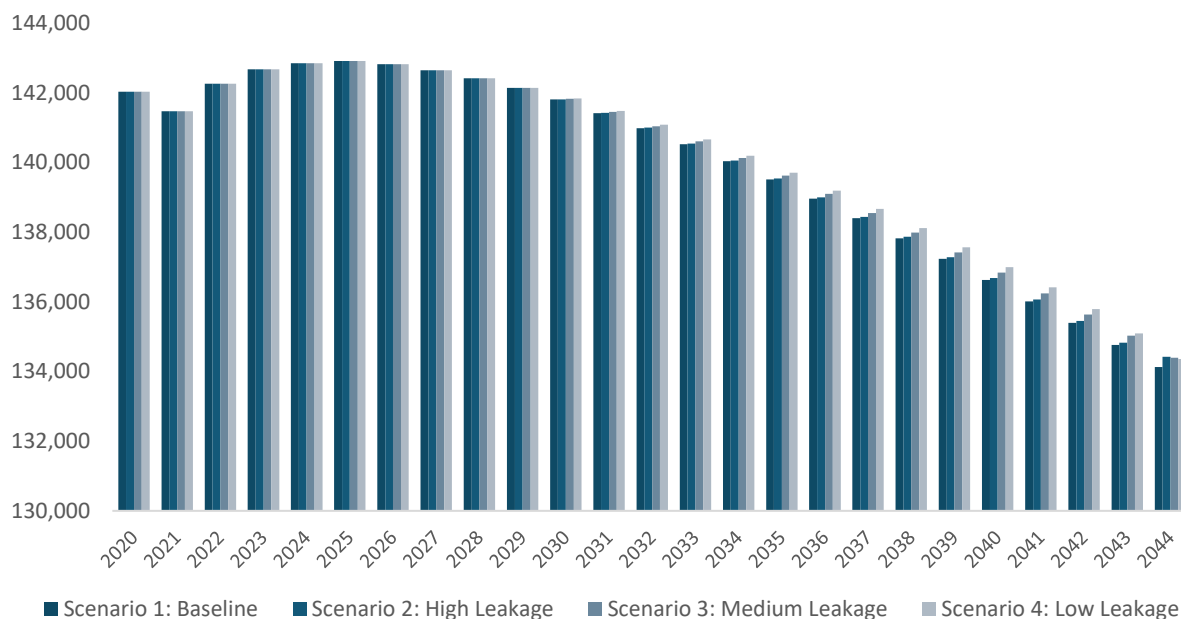
- **Scenario 3: ‘Medium Leakage’**

In this scenario the population is forecast to reach **134,391 by 2044**, a decline of 8,460 people, or -5.9% of the population (0.2 pp lower than the baseline), at an annual average decline of -0.3% (on par with the baseline).

- **Scenario 4: ‘Low Leakage’**

In this scenario the population is forecast to reach **134,361 by 2044**, a decline of 8,490 people, or -5.9% of the population (0.2 pp lower than the baseline), at an annual average decline of -0.3% (on par with the baseline).

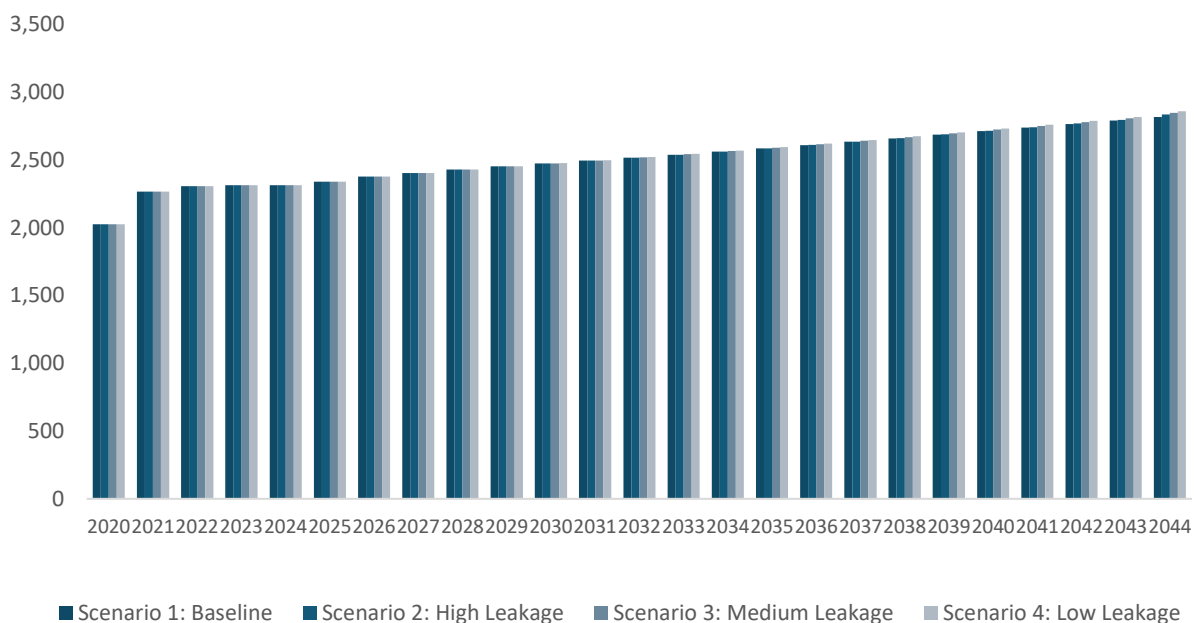
### Population forecasts for East Lindsey:



## 2.1.2 Regional Economy

- According to baseline forecasts, East Lindsey’s economy is set to reach **£2,818m Gross Value Added (GVA) by 2044**, this is an increase of £503m compared to 2024 estimates, or +21.7%, at an annual average growth rate of 0.9%.
- In contrast to the baseline, if a GDF facility were to be built in East Lindsey, three different GVA growth scenarios can be forecast based on scenarios outlined in Table 1 earlier:
  - **Scenario 2: ‘High Leakage’**  
In this scenario the GVA is forecast to reach **£2,834m GVA by 2044** (£17m higher than the baseline), and increase of £520m, or +22.5% (0.8 percentage points (pp) higher than the baseline), at an annual average growth rate of 1.0% (0.1 pp higher than the baseline).
  - **Scenario 3: ‘Medium Leakage’**  
In this scenario the GVA is forecast to reach **£2,846m GVA by 2044** (£29m higher than the baseline), and increase of £532m, or +23.0% (1.3 pp higher than the baseline), at an annual average growth rate of 1.0% (0.1 pp higher than the baseline).
  - **Scenario 4: ‘Low Leakage’**  
In this scenario the GVA is forecast to reach **£2,858m GVA by 2044** (£40m higher than the baseline), and increase of £544m, or +23.5% (1.8 pp higher than the baseline), at an annual average growth rate of 1.0% (0.1 pp higher than the baseline).

### GVA Forecasts for East Lindsey:



- **According to baseline forecasts, productivity in East Lindsey is set to reach £21,008 GVA per head by 2044**, this is a forecast increase of £4,805 GVA per head, equivalent to +29.7%, at an annualised average rate of +1.2%.



- In contrast to the baseline, if a GDF facility were to be built in East Lindsey, three different GVA per head growth scenarios can be forecast based on scenarios outlined in Table 1 earlier:

- **Scenario 2: ‘High Leakage’**

In this scenario the GVA per head is forecast to reach **£21,086 GVA per head by 2044** (£78 higher than the baseline), an increase of £4,883, or 30.1% (0.4 pp higher than the baseline), at an annual average growth rate of 1.3% (0.1 pp higher than the baseline).

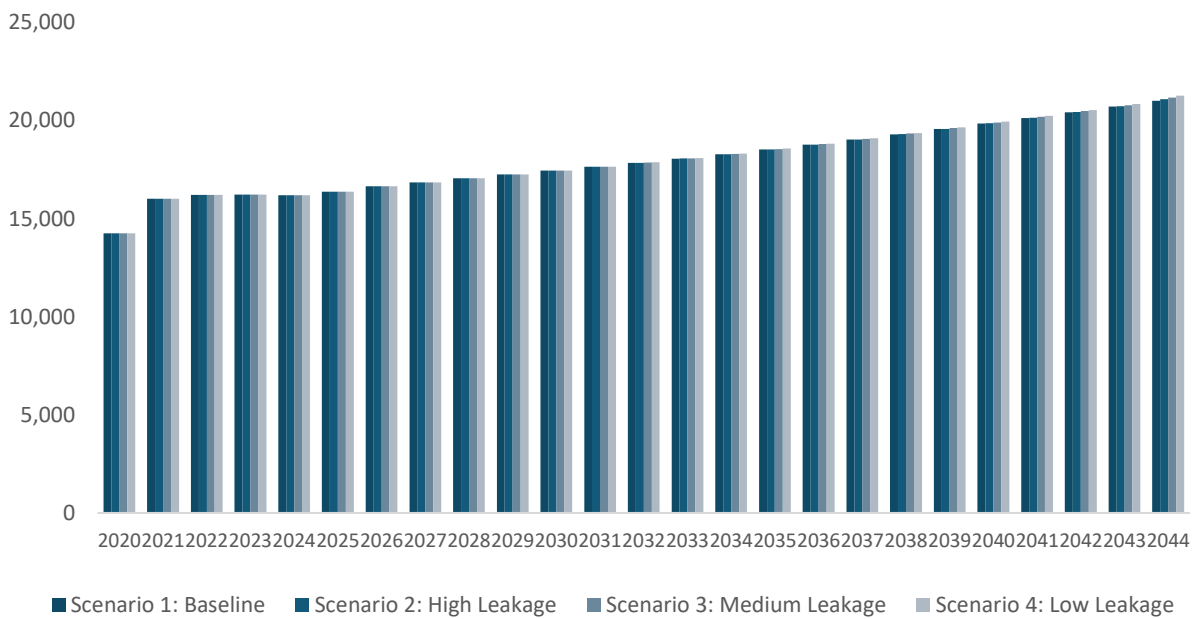
- **Scenario 3: ‘Medium Leakage’**

In this scenario the GVA per head is forecast to reach **£21,179 GVA per head by 2044** (£171 higher than the baseline), an increase of £4,976, or 30.7% (1.0 pp higher than the baseline), at an annual average growth rate of 1.3% (0.1 pp higher than the baseline).

- **Scenario 4: ‘Low Leakage’**

In this scenario the GVA per head is forecast to reach **£21,273 GVA per head by 2044** (£265 higher than the baseline), an increase of £5,070, or 31.3% (1.6 pp higher than the baseline), at an annual average growth rate of 1.3% (0.1 pp higher than the baseline).

**GVA per head forecasts for East Lindsey:**



### 2.1.3 Labour Market

- East Lindsey’s baseline jobs forecast is set to **reach 55,692 cumulative workplace jobs by 2044**, this is set to be a decrease of around -125 jobs, or -0.2%, at an annual average decline rate of -0.05%
- In contrast to the baseline, if a GDF facility were to be built in East Lindsey, three different cumulative employment scenarios can be forecast based on scenarios outlined in Table 1 earlier:

- **Scenario 2: ‘High Leakage’**

In this scenario employment is forecast to reach **55,996 jobs by 2044** (304 higher than the baseline), an increase of 178 jobs, or +0.3% (0.5 (percentage points) pp higher than the baseline). However, as part of a wider trend, and following the baseline, this is set to decline at an annual average rate of -0.02% (0.03 pp higher than the baseline). Despite having less job loss than the baseline, the wider trend in job decline from the baseline carries on in this scenario.

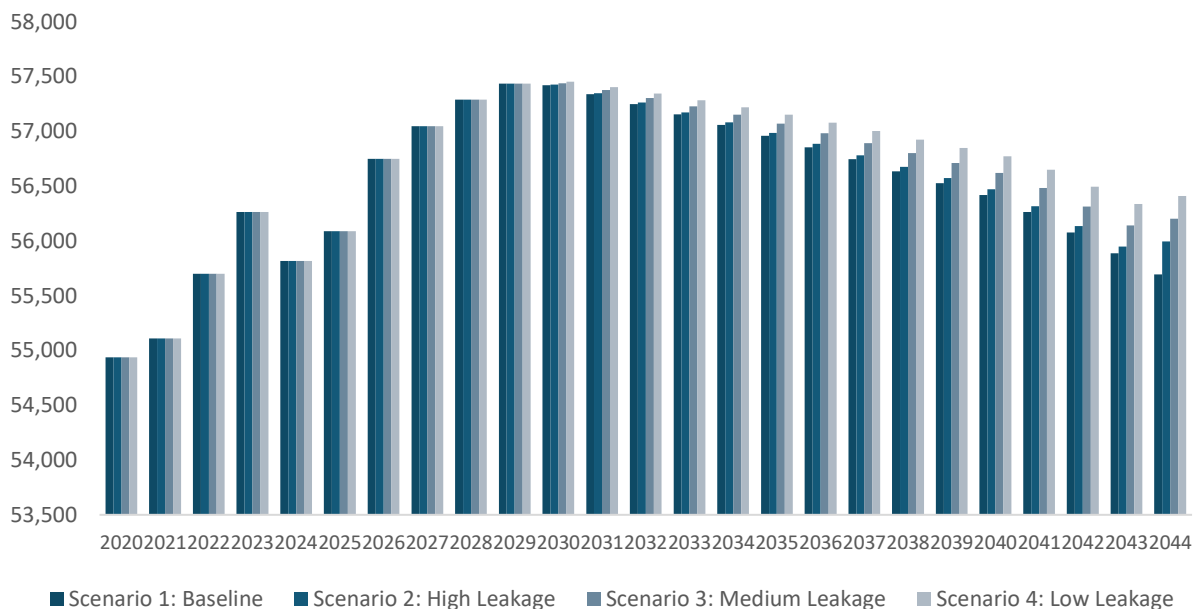
- **Scenario 3: ‘Medium Leakage’**

In this scenario employment is forecast to reach **56,203 jobs by 2044** (510 higher than the baseline), an increase of 385 jobs, or +0.3% (0.5 pp higher than the baseline), at an annual average growth rate of +0.00% (0.05 pp higher than the baseline). This scenario will also reverse the trend of declining job numbers seen in the baseline scenario.

- **Scenario 4: ‘Low Leakage’**

In this scenario employment is forecast to reach **56,410 jobs by 2044** (718 higher than the baseline), an increase of 592 jobs, or +1.1% (1.3 pp higher than the baseline), at an annual average growth rate of +0.01% (0.06 pp higher than the baseline). This scenario will also reverse the trend of declining job numbers seen in the baseline scenario.

#### Employment forecasts for East Lindsey:



- East Lindsey’s baseline ILO unemployment rate forecast is set to reach **4.6% by 2044**, a decrease of -1.6 pp since 2024, and between 2024 and 2050 is set to be at an average of 4.76%.
- In contrast to the baseline, if a GDF facility were to be built in East Lindsey, three different ILO unemployment rate scenarios can be forecast based on scenarios outlined in Table 1 earlier:

- **Scenario 2: ‘High Leakage’**

In this scenario the ILO unemployment rate is estimated to reach **4.6% by 2044**, a decrease of -1.6 pp since 2024 (the same as the baseline), and between 2024 and 2044 to have an average rate of 4.76% (the same as the baseline).

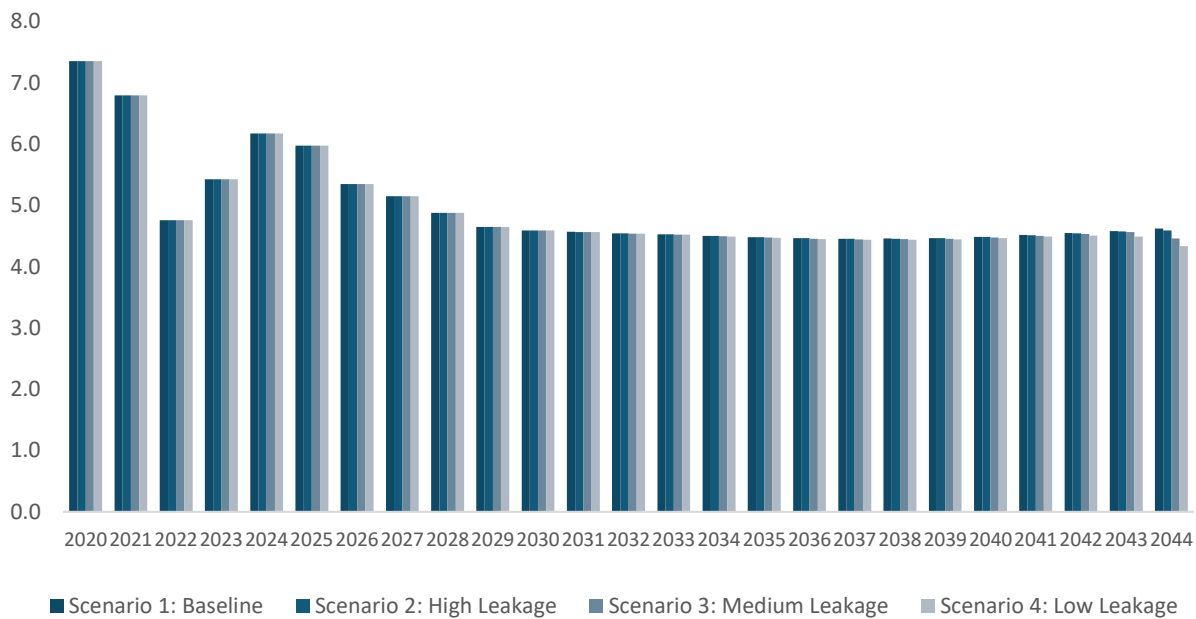
- **Scenario 3: ‘Medium Leakage’**

In this scenario the ILO unemployment rate is estimated to reach **4.5% by 2044**, a decrease of -1.7 pp since 2024 (0.1 pp lower than the baseline), and between 2024 and 2044 to have an average rate of 4.75% (0.01 pp lower than the baseline).

- **Scenario 4: ‘Low Leakage’**

In this scenario the ILO unemployment rate is estimated to reach **4.3% by 2044**, a decrease of -1.8 pp since 2024 (0.2 pp lower than the baseline), and between 2024 and 2044 to have an average rate of 4.73% (0.03 pp lower than the baseline).

**ILO unemployment rate (%) forecast for East Lindsey:**



#### 2.1.4. Additional Benefits

- In the fiscal year 2023/24, East Lindsey's Council Tax requirement was £7.496 million, of which £4.888 million (approximately 65%) was allocated to IDB levies. **For every £10 of Council Tax, East Lindsey District Council received 80p for services.** Of that 80p – 52p was directed to the IDB<sup>20</sup>.
- Establishing a Geological Disposal Facility (GDF) in East Lindsey would unlock substantial community investment funding aimed at supporting local development and well-being. Initially, **communities participating in the GDF siting process are eligible for up to £1 million per year in Community Investment Funding** – £2m has already been administered by the Theddlethorpe GDF Community Partnership since 2022 for schemes that support young people and projects that reduce hardship and increase pride in place. This funding is intended for projects that:
  - Provide economic opportunities
  - Enhance the natural and built environment
  - Improve community well-being
- **If the project progresses to site characterisation, the annual funding received could increase to £2.5 million p.a.**<sup>21</sup>. This funding is designed to recognise the long-term nature of the GDF project and to ensure that communities benefit from improved infrastructure, job creation, and enhanced public facilities.

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<sup>20</sup> <https://www.lincolnshireworld.com/news/why-a-fairer-funding-formula-is-needed-to-prevent-more-flooding-misery-in-east-lindsey-4458481>

<sup>21</sup> <https://theddlethorpe.workinginpartnership.org.uk/>

## 2.2 Wider Economic Impact Assessment (2024 – 2050)

While local job opportunities can be identified during the early phases, particularly site characterisation, their relevance diminishes when considering the broader impacts leading up to 2050. However, early impacts, such as local job creation and business opportunities during the site characterisation, are crucial for councils and business organisations, providing immediate economic benefits to the region. ‘Early’ impacts are explored in [Section 2.1](#), however it’s also worth noting that the more jobs created in East Lindsey during this phase, the greater the long-term benefits through the Midlands Oxford Economic Model, driven by the ripple effect of economic multipliers. This section focuses on the wider economic impacts that would be seen in the construction and operation phase. The table below outlines scenario assumptions that have been made to develop the forecasting analysis:

**Table 2. Tranche Assumptions**

Scenario	Tranche	
	Construction	Operations
<b>Baseline</b>	‘Do Nothing’ scenario; expected trajectory of economic activity without the development of a GDF facility, a business-as-usual approach based on past economic trends with no intervention.	
<b>Forecast</b>	5% leakage; 95% role retention	33% leakage; 67% role retention

The scenario forecasting highlights several headline impacts a GDF could potentially have in East Lindsey by 2050:

- **The Gross Value Added (GVA) for East Lindsey is projected to increase to £3,112m**, representing a growth of £138m compared to the baseline.
- **Jobs in East Lindsey are forecast to rise to a cumulative total of 56,636 jobs**, 2,112 more than the baseline, in contrast to the trend of declining job numbers seen in the baseline, leading to an increase in employment opportunities.
- **The ILO unemployment rate would potentially drop to 3.9%**, representing an improvement of 1.0 percentage point (pp) compared to the baseline, and putting the rate on the same terms as Greater Lincolnshire by 2050.
- **The population is projected to decline to 130,647**, an increase of 456 people compared to the baseline, suggesting the potential for population growth driven by economic opportunities tied to the GDF development.
- **Productivity per person could rise to £23,823**, an improvement of £973 over the baseline, but still below Greater Lincolnshire, East Midlands and UK forecasts.

The below tables set out the baseline scenario alongside a 2050 forecast if the GDF were to be located in East Lindsey, alongside broader comparisons within the context of the wider region across a series of metrics. Wider geographies are included to provide a greater economic context, these are Greater Lincolnshire (LEP geography, serving as a proxy for the future Greater Lincolnshire Combined County Authority), the East Midlands (region), and the UK (national).

**East Lindsey Economy Summary Table – GVA (£m)**

Modelling Scenario	2024 Figures	2050 Forecast	Difference
<b>Baseline</b>	2,315	2,975	+660
<b>Forecast</b>	2,315	3,112	+798
<b>Context: Greater Lincolnshire</b>	24,370	31,946	+7,576
<b>Context: East Midlands</b>	115,998	161,054	+45,056
<b>Context: UK</b>	2,034,817	2,981,784	+946,967

*GVA increases range from £660m in the ‘Baseline’ scenario to £798m in the ‘Forecast’, compared to £7.6bn for Greater Lincolnshire, £45.1bn for the East Midlands, and £947bn for the UK.*

**East Lindsey Economy Summary Table - Cumulative Jobs**

Modelling Scenario	2024 Figures	2050 Forecast	Difference
<b>Baseline</b>	55,818	54,524	-1,294
<b>Forecast</b>	55,818	56,636	+818

<b>Context: Greater Lincolnshire</b>	528,158	514,019	-14,139
<b>Context: East Midlands</b>	2,460,275	2,570,390	+110,115
<b>Context: UK</b>	36,483,050	39,295,930	+2,812,880

Jobs decline by 1,294 in the 'Baseline' scenario but increase by up to 818 in the 'Forecast'. In comparison, Greater Lincolnshire sees a loss of 14,139 jobs, while the East Midlands and UK gain 110,115 and 2.8 million jobs, respectively.

### East Lindsey Economy Summary Table – ILO Unemployment Rate (%)

Modelling Scenario	2024 Figures	2050 Forecast	Difference
<b>Baseline</b>	6.2	4.9	-1.3 pp
<b>Forecast</b>	6.2	3.9	-2.3 pp
<b>Context: Greater Lincolnshire</b>	3.8	3.9	+0.1 pp
<b>Context: East Midlands</b>	3.8	3.3	-0.5 pp
<b>Context: UK</b>	4.6	3.8	-0.8 pp

The ILO unemployment rate declines from 6.2% to 4.9% in the 'Baseline' scenario and to as low as 3.9% in the 'Forecast'. Comparatively, Greater Lincolnshire sees a slight increase (+0.1 pp), while the East Midlands and UK experience decreases of 0.5 pp and 0.8 pp, respectively.

### East Lindsey Economy Summary Table – Population

Modelling Scenario	2024 Figures	2050 Forecast	Difference
<b>Baseline</b>	142,851	130,191	-12,660
<b>Forecast</b>	142,851	130,647	-12,204
<b>Context: Greater Lincolnshire</b>	1,152,920	1,118,325	-34,595
<b>Context: East Midlands</b>	4,962,865	5,158,360	+195,495
<b>Context: UK</b>	682,128,700	70,309,000	+2,096,130

Population decreases across all scenarios, ranging from -12,660 in the 'Baseline' to -12,204 in the 'Forecast'. Greater Lincolnshire also declines (-34,595), while the East Midlands and UK see growth of 195,495 and 2.1 million, respectively.

### East Lindsey Economy Summary Table – Productivity (GVA per head)

Modelling Scenario	2024 Figures	2050 Forecast	Difference
<b>Baseline</b>	£16,203	£22,849	+£6,646
<b>Forecast</b>	£16,203	£23,823	+£7,619
<b>Context: Greater Lincolnshire</b>	£21,138	£28,566	+£7,428
<b>Context: East Midlands</b>	£23,373	£31,222	+£7,849
<b>Context: UK</b>	£29,830	£42,410	+£12,579

GVA per head rises from £16,203 to between £22,849 ('Baseline') and £23,823 ('Forecast'), with increases slightly below regional and national contexts, where GVA per head grows by £7,849 in the East Midlands and £12,579 across the UK.

### Potential Impact of a GDF in East Lindsey (2050 'Baseline' vs 2050 Scenarios):

Key Impact Metric	Forecast
<b>Economic Growth</b>	Economy 4.6% larger by 2050.
<b>Cumulative Workplace Jobs</b>	Additional 2,100 workplace jobs by 2050.
<b>Productivity</b>	Average productivity up 0.7% by 2050.
<b>Residents Employed</b>	Additional 1,600 residents employed by 2050.
<b>Resident Employment Rate</b>	1.3pp increase in the resident employment rate by 2050.
<b>Fewer Unemployed Residents</b>	400 fewer residents unemployed by 2050.
<b>Unemployment Rate</b>	1.0pp fall in the unemployment rate by 2050.
<b>Working Age Population Growth</b>	Additional 400 working age residents by 2050.

### Translating the Forecast into Economic Impact

The forecasts above provide technical figures for all four scenarios and three tranches, translating into real jobs aligned with broader economic impacts in East Lindsey. Below is an outline of how the GDF will drive economic growth through job creation, boosting the local economy and establishing a new asset in the area.

## Cumulative Job Impact by 2050:

Function	Forecast
Project and Programme Management	203
Engineering	58
Science, Technical & SHE (Safety, Health and Environment)	161
Business Functions	161
Trades	932
Operations	281
<b>Total Direct Roles</b>	<b>1,795</b>
<b>Total Additional Roles</b>	<b>317</b>
<b>Total Roles</b>	<b>2,112</b>

Total roles in East Lindsey are forecast to reach an extra 2,112, with the largest gains in Trades and Science, Technical & SHE roles, reflecting varying levels of local economic retention across scenarios.

## Impact through tranche annual average results

Whilst the above table provides a cumulative impact for roles by 2050, the below tables explore what the annual average Full-Time Equivalent (FTE) jobs could be during each tranche of a GDF in East Lindsey given the model's multiplier effects. Each tranche in each scenario was modelled individually and independently of one another for accuracy.<sup>22</sup>

## Forecasted independent tranche annual averages:

Tranche	Direct Annual Average Jobs	Additional Annual Average Jobs	Total Annual Average Roles
Site Characterisation	57	12	69
Construction	1,208	204	1,412
Operations	470	159	629
<b>Total</b>	<b>1,735</b>	<b>375</b>	<b>2,110</b>

Total roles average 2,110 annually, with the majority during construction (1,412), followed by operations (629) and site characterisation (69).

The above tables show that on top of including direct jobs (both temporary roles during site characterisation and construction, and permanent roles during operations) a GDF would also bring in a multitude of additional roles which can be considered indirect and induced roles. Notably, these direct jobs are expected to deliver higher GVA than average for East Lindsey should the community proceed with the GDF.

Indirect roles in East Lindsey would arise from the supply chains and wider related industries such as further manufacturing, utilities, construction, and professional services. These roles may include project managers, engineers, skilled tradespeople, and technical consultants supporting a GDF's construction and operation.

Additionally, induced roles would be created through workers spending their wages on local goods and services. This local spend would include housing, shopping, transport, accommodation, and other support activities. Induced roles may include retail staff, drivers, accommodation and hospitality roles, and administrative personal in local businesses alongside service providers.

The following sections (2.2.1 to 2.2.3) present an analysis of East Lindsey's economy across a series of core metrics covering the population, regional economy and labour market. For simplicity, each section and metric outline the baseline forecast to 2050 which is then compared to the modelled scenario.

It is worth noting that the modelled scenario is cumulative, benefitting from economic multiplier effects generated by previous tranches. In this report 'cumulative' means that the scenario incorporates the sequential progression of each modelled tranche – site characterisation followed by construction, and then operation – where the overall economic benefits grow as each phase advances, rather than being treated in isolation.

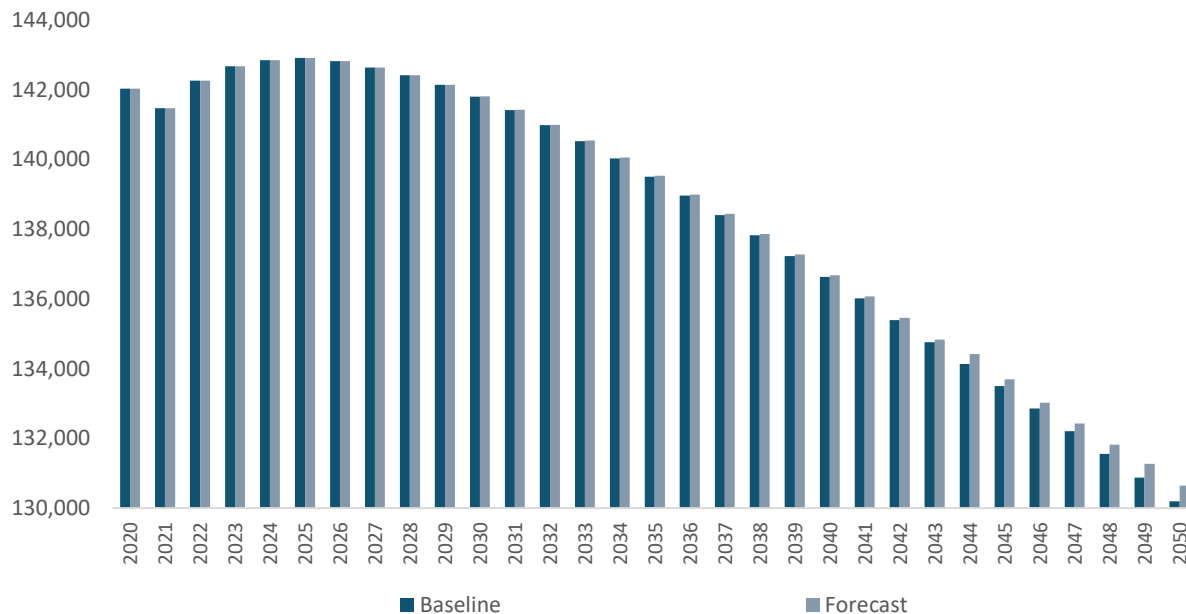
<sup>22</sup> Please note that unlike the 'Cumulative Job Impact by 2050' table, these figures are based on 'shocking' certain years within the forecasting model and running all tranches individually, without cumulative effects, across all scenarios. In this case, 'shocking' means inputting all direct jobs at the beginning of a tranche rather than dispersing them via the model to provide a higher degree of accuracy when it comes to annual average jobs.

## 2.2.1 Population

East Lindsey’s baseline population forecast suggests that the **population will reach 130,191**, this is set to be a decline of around 12,660 people, or -8.9% of the population, at an annual average decline of -0.3%.

In contrast to the baseline, if a GDF facility was to be built in East Lindsey, the population is forecast to reach **130,647**, a decline of 12,204 people, or -8.5% of the population (0.4 percentage points (pp) lower than the baseline), at an annual average decline of -0.3% (on par with the baseline).

### Population forecasts for East Lindsey:



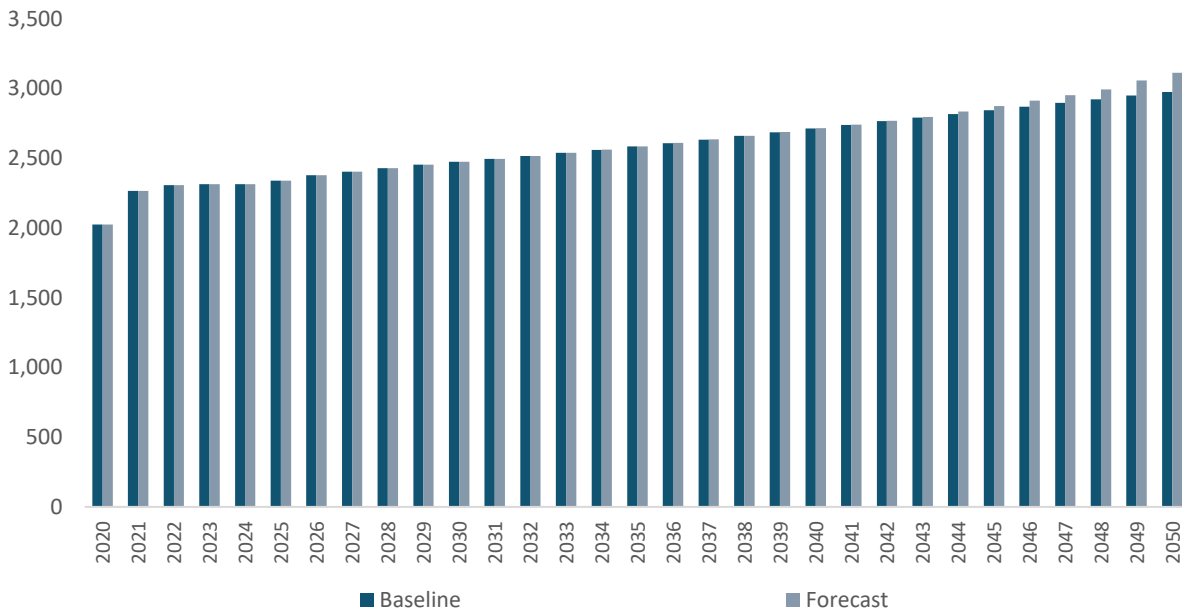
## 2.2.2 Regional Economy

According to baseline forecasts, East Lindsey’s economy is set to reach **£2,975m Gross Value Added (GVA) by 2050**, this is an increase of £660m compared to 2024 estimates, or +28.5%, at an annual average growth rate of 0.9%.

In contrast to the baseline, if a GDF facility was to be built in East Lindsey, the GVA is forecast to reach **£3,112m GVA by 2050** (£138m higher than the baseline), and increase of £798m, or 34.5% (6.0 percentage points (pp) higher than the baseline), at an annual average growth rate of 1.1% (0.2 pp higher than the baseline).



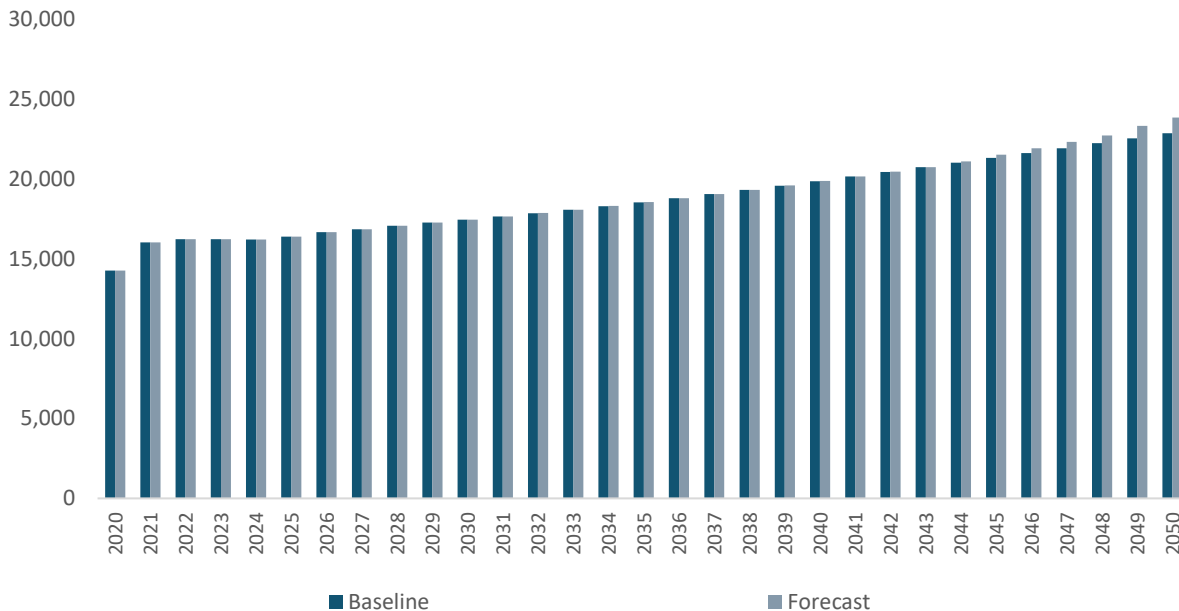
### GVA Forecasts for East Lindsey:



According to baseline forecasts, productivity in East Lindsey is set to reach **£22,849 GVA per head by 2050**, this is a forecast increase of +£6,646 GVA per head, equivalent to +41.0%, at an annualised average rate of +1.3%.

In contrast to the baseline, if a GDF facility was to be built in East Lindsey, the GVA per head is forecast to reach **£23,823 GVA per head by 2050** (£973 higher than the baseline), an increase of £7,619, or 47.0% (6 pp higher than the baseline), at an annual average growth rate of 1.4% (0.1 pp higher than the baseline).

### GVA per head forecasts for East Lindsey:

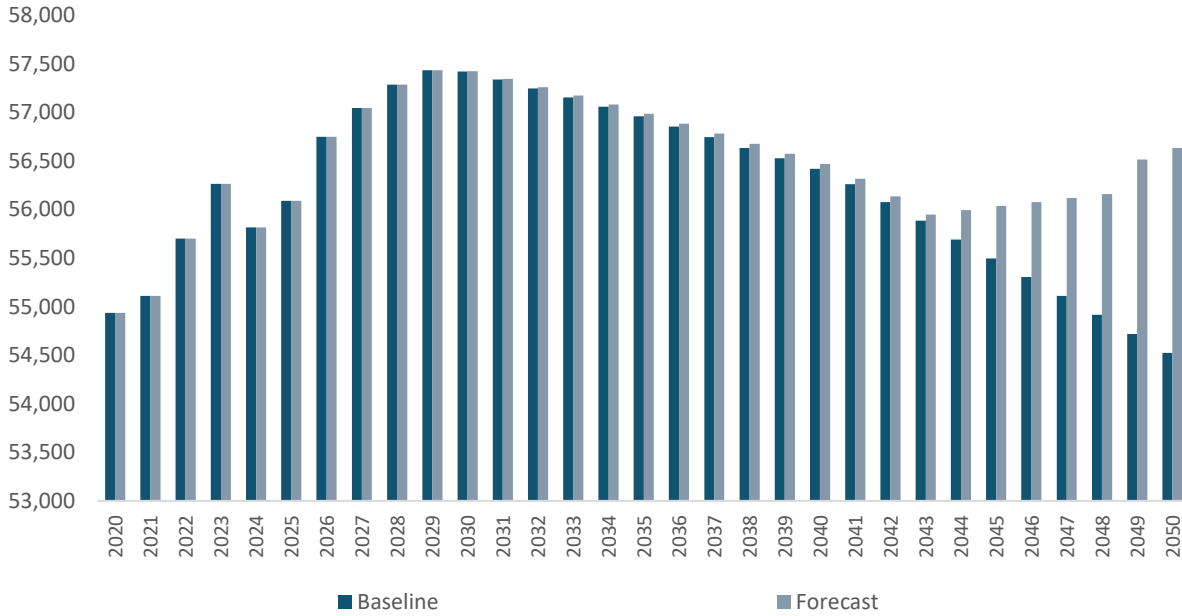


### 2.2.3 Labour Market

East Lindsey’s baseline jobs forecast is set to **reach 54,524 workplace jobs by 2050**, this is set to be a decrease of around 1,294 jobs, or -2.3%, at an annual average decline rate of -0.1%.

In contrast to the baseline, if a GDF facility was to be built in East Lindsey, employment is forecast to reach **56,636 jobs by 2050** (2,112 higher than the baseline), an increase of 818 jobs, or 1.5% (3.8 percentage points (pp) higher than the baseline), at an annual average growth rate of 0.0% (0.1 pp higher than the baseline). This scenario will also reverse the trend of declining job numbers seen in the baseline scenario.

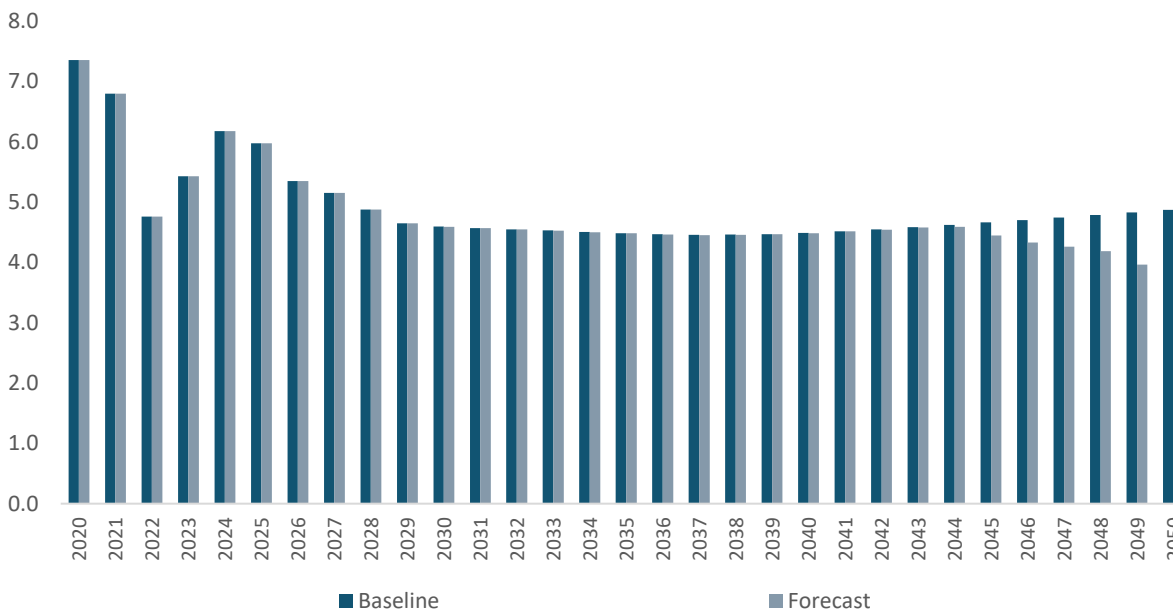
**Employment forecasts for East Lindsey:**



East Lindsey’s baseline ILO unemployment rate forecast is set to reach **4.9% by 2050**, a decrease of 1.3 pp since 2024, and between 2024 and 2050 is set to be at an average of 4.8%.

In contrast to the baseline, if a GDF facility was to be built in East Lindsey, the ILO unemployment rate is estimated to reach **3.9% by 2050**, a decrease of 2.3 pp since 2024 (1.0 pp lower than the baseline), and between 2024 and 2050 to have an average rate of 4.6% (0.1 pp lower than the baseline).

**ILO Unemployment Rate (%) forecast for East Lindsey:**



### 3. Conclusion

#### Economic Context and Growth Potential

- **East Lindsey has historically lagged behind regional and national economic growth rates**, with lower productivity and fewer high-value employment opportunities.
- Despite steady population growth in the past, **forecasts suggest a future decline in both total population and the working-age demographic**, highlighting the need for proactive measures to retain and attract workers.
- **Business density remains lower than national and regional averages**, with a predominance of micro-sized enterprises and fewer large employers capable of driving sustained economic growth.
- The district has notable economic strengths, including a strong visitor economy, a well-established agri-food sector, and an emerging focus on manufacturing, but **continued diversification is needed to enhance long-term resilience**.

#### Workforce and Employment Landscape

- **East Lindsey has a lower proportion of residents with higher-level qualifications (RQF Level 4+)**, which presents challenges for attracting investment in knowledge-intensive industries.
- **Employment rates have improved in recent years but remain below the national average**, with significant reliance on seasonal and lower-wage sectors such as hospitality and retail.
- Forecasts suggest that, without intervention, **East Lindsey could see a decline in total jobs by 2050**, exacerbating existing economic challenges.
- A large-scale investment project that introduces high-skilled, well-paid jobs has the potential to reverse some of these trends and support long-term workforce sustainability.

#### Economic Impact of a GDF

- An economic impact assessment of East Lindsey indicates that **a Geological Disposal Facility (GDF) could generate up to 2,100 additional jobs in East Lindsey by 2050**, spanning multiple sectors including construction, engineering, logistics, and professional services.
- **Increased employment opportunities could help reduce the unemployment rate by up to 1.0 percentage point more than in the baseline forecast**, strengthening the local labour market.
- **Gross Value Added (GVA) per head is projected to rise by 41% in the baseline scenario but could increase by up to 47% with the introduction of a GDF**, contributing to improved regional economic performance.
- **The presence of a long-term, stable employer could help retain younger workers** in the district by offering high-skilled career opportunities that currently have limited availability.

#### Population and Labour Market Impacts

- Without new economic drivers, **East Lindsey's population is forecast to decline by 12,660 people by 2050**, with a notable reduction in working-age residents.
- **The introduction of a GDF could help mitigate this population decline**, with projections indicating the potential to attract and retain an additional 400 working-age residents by 2050.
- **A large-scale infrastructure project could encourage investment in skills development**, particularly in technical and professional fields, reducing skills leakage to other regions.
- **New employment opportunities could help rebalance the local economy**, shifting reliance away from seasonal employment towards higher-value, year-round job opportunities.

#### Infrastructure and Business Environment

- **Transport and digital connectivity remain key barriers to economic growth**, particularly in rural areas of the district.

- **A GDF could catalyse investment in infrastructure improvements**, benefiting not only the project but also the wider business community and local residents.
- **Supply chain development linked to a major infrastructure project could support the growth of local businesses**, creating additional indirect and induced job opportunities.
- **East Lindsey has land availability for industrial and commercial development**, which could be further leveraged to accommodate long-term investment and business expansion.

### **Broader Economic and Community Benefits**

- In addition to direct and indirect job creation, **a GDF could unlock up to £2.5 million per year in Community Investment Funding** if the project progresses to site characterisation.
- **This funding could support local initiatives in education**, skills development, infrastructure improvements, and community well-being, addressing some of the district's socio-economic challenges.
- Economic modelling suggests that **investment of this scale could help diversify East Lindsey's economic base**, reducing reliance on traditional seasonal sectors and improving overall resilience.
- **A GDF's longevity could provide sustained economic benefits over multiple decades**, creating a more stable and predictable local economy.

### **Long-Term Economic Sustainability**

- The current baseline forecast suggests that, **without intervention, East Lindsey's economy will continue to grow at a slower rate than the wider East Midlands and UK**, reinforcing the need for strategic investment.
- **A GDF could act as a significant economic driver**, helping to align East Lindsey's growth trajectory more closely with regional and national trends.
- **Ensuring alignment between workforce skills and emerging job opportunities will be critical** in maximising the benefits of any large-scale development.
- **Collaboration between local authorities, businesses, and educational institutions will be key** to ensuring that workforce readiness and economic development strategies are effectively integrated.

### **Final Considerations**

- **East Lindsey faces economic challenges but also has opportunities for growth** through investment, workforce development, and infrastructure improvements.
- The economic impact assessment indicates that **a GDF has the potential to deliver significant long-term benefits**, including job creation, economic diversification, and increased productivity.
- **The report findings provide a detailed evidence base for policymakers, businesses, and local stakeholders to support broader discussions on the district's future.**