

Lancashire Local Enterprise Partnership

Food and Agriculture study

APPENDICES

May 2022

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Appendix 1 – Food and Agriculture Sector Definition

Defining the Sector

It is important that there is a shared understanding of what we mean by the ‘Food and Agriculture sector’. This particularly applies to the analysis of the quantitative data. ONS data has many strengths – it enables comparison between places and over time on a consistent basis, allowing the relative position of Lancashire’s Food and Agriculture sector to be understood. However, ONS data on employment, businesses and output (GVA) is categorised using the Standard Industrial Classification (SIC) code system, which has a number of limitations.

In general, the SIC code system works quite well for the agriculture and food processing (manufacturing) sector. The wholesale and retail of food products can also be differentiated from the wider wholesale and retail sector, allowing the food-specific elements of wholesale and retail to be included in the overall Food and Agriculture sector definition.

Unfortunately, the same is not true for other linked sectors, including logistics and professional services. Whilst these are an important part of the Food and Agriculture supply chain, it is not possible (using the official datasets) to separate out the parts of these sectors which are linked to Food and Agriculture. We will use the local insights and qualitative feedback to understand skills issues affecting the Food and Agriculture sector which are linked to logistics and other supporting sectors, but do not propose to include e.g. logistics businesses in the count of businesses in the Food and Agriculture sector.

A further area for discussion is the treatment of ‘food and beverage service activities’ – that is, hospitality, restaurants and bars. In Lancashire, these activities are included in the sector definition used for the Visitor Economy sector, although nationally, the Food and Drink Federation does include hospitality within its definition of the sector. We do not propose to include hospitality within the definition used for the Food and Agriculture LMI research, but would welcome a discussion on this point.

Food and Agriculture SIC Sector Definition – As Agreed with the Sector Group		
SIC Code	Coverage	Comments
01	Crop and animal production, hunting and related service activities <ul style="list-style-type: none"> production of crop products production of animal products <i>Organic agriculture, the growing of genetically modified crops and the raising of genetically modified animals; growing of crops in open fields as well in greenhouses; plus service activities incidental to agriculture, as well as hunting, trapping and related activities</i>	Include all
02	Forestry and logging Silviculture and other forestry activities; logging; gathering of wild growing products; support services to forestry	Gather data but show separately to main Food and Agriculture sector
03	Fishing and aquaculture	Include all

Food and Agriculture SIC Sector Definition – As Agreed with the Sector Group		
SIC Code	Coverage	Comments
	Capturing or gathering fish, crustaceans, molluscs and other marine organisms and products Service activities incidental to marine or freshwater fishery or aquaculture are included	
10	Manufacture of food products Processing of the products of agriculture, forestry and fishing into food for humans or animals	Include all
11	Manufacture of beverages Non-alcoholic beverages and mineral water; alcoholic beverages; manufacture of distilled alcoholic beverage	Include all
46.11	Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods	Include all
46.17	Agents involved in the sale of food, beverages and tobacco	Include all
46.2	Wholesale of agricultural raw materials and live animals	Include all
46.3	Wholesale of food, beverages and tobacco	Include all
46.61	Wholesale of agricultural machinery, equipment and supplies	Include all
47.2	Retail sale of food, beverages and tobacco in specialised stores	Include all
49.41	Freight transport by road	Exclude – Food and Agriculture -related transport cannot be disaggregated from other transport activity
56	Food and beverage service activities Restaurants; Take-aways; Event catering; Bars	Include in sector definition; show sector size including / excluding F&B, so that the overlap with the Visitor Economy sector can be quantified
64.20/1	Activities of agricultural holding companies	Include
72.11	Research and experimental development on biotechnology	Exclude – Food and Agriculture -related activity cannot be disaggregated from other activity
72.19	Other research and experimental development on natural sciences and engineering	Exclude – Food and Agriculture -related activity cannot be disaggregated from other activity
75.00	Veterinary activities	As per Forestry – gather data but show separately from the main Food and Agriculture sector
77.31	Renting and leasing of agricultural machinery and equipment	Include

Appendix 2 – Strategic Context

Introduction

The Food and Agriculture sector is integral to a number of sectors in the UK’s economy including retail, hospitality and tourism. It contributes considerably to a whole range of national and local policies that link the Food and Agriculture sector to wider policy objectives, including building a sustainable economic system, improving the health of the UK’s population, wholesale and retail trade, closing the skills gap for employers and helping the recovery from Covid-19 pandemic.

National

The **Food and Drink Sector Council (FDSC)** is a formal industry-led partnership with Government to increase the productivity and sustainability of the UK’s Food and Agriculture sectors. Its focus is on cross-industry challenges and opportunities, providing a strategic view on behalf of the overall industry. It is the gateway for Government into the food industry value chain to address the big challenges and opportunities through collaboration, innovation, entrepreneurialism and ambition.

The Council’s strategy, **Feeding the Future: Working together to build the National Food Strategy** (October 2021) sets out the vision for the UK’s food industry vision for 2030 which is to create a “thriving UK farm-to-fork food sector that is innovative, collaborative and globally competitive that provides fantastic, affordable food sustainably and to the highest standards. Also a food sector that supports healthier diets and encourages better choices and offers exciting business and employment opportunities throughout the food chain”.

The Strategy sets out the objectives for which private companies, industry bodies and the government should strive to achieve. The objectives of the Strategy are shown in Table A2.1.

Table A2.1: FDSC Objectives					
A more productive, highly skilled food and drink sector	A food and drink sector that is more innovative	A food and drink sector that trades with ease at home and abroad	A sustainable food and drink sector for the future	A food and drink sector that provides healthy and affordable food for all	A food and drink sector that works in partnership with government on the big issues
Increase the Gross Value Added (GVA) generated by food and drink by a third by 2030.	Double the industry’s R&D spend by 2027.	Increase the value of exports.	Achieve sectoral emissions reductions target for 2030 to indicate pathway to 2040 net-zero target.	Half childhood obesity rates.	Create a structure for a coherent approach to and effective delivery of food policy across Whitehall departments and the Devolved Administrations.
Provide the resources to embed, attract and skill more people throughout the	Increase the amount of R&D funding towards SMEs for agriculture and	Increase the proportion of food and drink businesses exporting from	Improve water use and improve soil health by 2030.	Reverse the rate of adult obesity.	Continue its commitment to the work of the Food and Drink Sector Council to deliver

food and drink sector.	food and drink manufacturing.	the current 17% level.			the outcomes of the National Food Strategy.
Routinely offer the opportunity for everyone in the industry to gain a qualification by 2030 so the workforce and industry has the skills needed for digitalisation, decarbonisation, sustainability, and the circular economy.	Increase consumer support for innovative food and drink products.	Increase the proportion of SMEs exporting.	As a priority, establish clear agreed definitions and measures on biodiversity, as the first step in a decade of progress to reverse biodiversity loss in the UK.	Remove the dependency on food banks by 2030.	
Reverse the trend of the decline of apprenticeship starts.			Have zero food waste sent to landfill by 2030.		
			Transform performance on minimising waste in packaging and maximising recycling by 2030.		

The FDSC also published a **Covid-19 Recovery Plan** separately in July 2020 with the aim of rebuilding the food industry and renewing the food system post-pandemic. The Covid-19 crisis reinforced both the strength and the fragility of the UK’s food system and industry. Across the food industry, fundamental changes took place at a very rapid pace. The economic impacts include increased sales for retailers, and the farmers, producers and manufacturers that supply them. In turn, businesses in hospitality, restaurants and catering, and those that supply them, saw their sales decline as a result of government guidance. In particular the Plan outlines the key elements of transformation during and in recovery of the Covid-19 crisis in terms of changing consumer and customer behaviour; channels and routes to market; product ranges; costs and margins; export and import profiles: and ways of working.

Covid-19 has also brought with it an opportunity to build important lessons into an improved food industry to create a more resilient, cleaner, greener and healthier food system for the future. The key recommendations of the FDSC Covid-19 recovery plan are to take:

- a phased, coordinated and flexible restart plan;
- the extension and tapering of industry support schemes;
- a united effort to support the industry’s worst-hit sectors;
- protecting the health of food industry employees and ensuring reliable availability of labour; and

- protecting the UK’s supply chain integrity and competitive position 6. And accelerating plans to increase UK export.

The FDSC’s skills report, **Preparing for a changing workforce: A food and drink supply chain approach to skills (October 2019)**, outlines the vital importance of the UK’s supply chain to the functioning of the economy. Within the report, the FDSC highlights the existing difficulty in recruiting, and the expected shortfall in labour and skills availability but also outlines how creating highly skilled, well-paid and home-grown talent is critical to realising the potential of the UK’s food industry. It realises that this will be most effective by combining sector-led solutions to upskill and attract talent with related government activities, particularly the ongoing reforms to technical education. The objectives in relation to the UK’s food industry workforce are to:

- deliver technical and management skills and attract future talent through greater use of apprenticeships and offering T Level work placements across the sector;
- improve accessibility, sustainability and quality of training provision for food and drink businesses of all sizes located in all regions of the UK; and
- professionalise leadership and management skills across the sector. To ensure managers are prepared for a changing workplace.

A focal part of the UK’s food industry is agriculture. Acknowledging the importance of the UK’s farming and growing industry, the **Agricultural Productivity Working Group (APWG)** was established by mandate of the FDSC to identify how, working in partnership, industry and government could unlock greater productivity growth across the sector. The APWG’s vision is “for a world-leading, competitive and sustainable agriculture and horticulture industry that can meet consumer demands for high quality products at every price point”. The APWG’s Working Group report concentrates on the “scourge of low productivity growth” and recommends overhauling current innovation and knowledge channels and systems by increasing the uptake of agricultural skills and training and driving infrastructure and policy support.

The two-part **National Food Strategy** urges a once-in-a-lifetime opportunity to reshape the food system in the wake of the Covid-19 pandemic and the EU Exit transition. The Strategy contains recommendations to address the major issues facing the food system including climate change, biodiversity loss, land use, diet-related disease, health inequality, food security and trade.

The Strategy aims to ensure the UK’S food system:

- delivers safe, healthy, affordable food, regardless of where people live or how much they earn;
- is robust in the face of future shocks;
- restores and enhances the natural environment for the next generation in this country;
- is built upon a resilient, sustainable and humane agriculture sector;
- is a thriving contributor to urban and rural economies, delivering well paid jobs and supporting innovative producers and manufacturers across the country; and
- delivers all this in an efficient and cost-effective way.

A key message outlined in the second part of the National Food Strategy is the impact on human health of the poor diet, which eclipses even the damaging effect of smoking on the detrimental impact on human health. The report emphasises the personal, economic and societal costs of avoidable ill health or death caused by poor nutrition and the importance of changing the food system in favour of creating a healthy population. Public Health England’s **Eatwell Guide: Helping you eat a healthy, balanced diet and Guide to the Government’s Healthy Eating Recommendations** is a framework which highlights that importance of all parts of the food sector in achieving a healthy and balanced diet. It establishes the need for a variety of different foods to provide the human body with all the nutrients it needs to be healthy. The consumption of food and its importance to human health is further reinforced by the Department of Health and Social Care Policy paper, **Tackling obesity: empowering adults and children to live healthier lives** (published in July 2020) and the British Medical Association’s **Strategy for Improving the nation’s diet: Action for a healthier future**.

Tackling obesity is one of the UK government’s highest health priorities. The large proportion of the population who are overweight or obese (63% of adults are considered overweight and 1 in 5 children are obese when they leave primary school) are more likely to encounter diseases and health inequalities, and may experience a reduced life expectancy. In relation to the food industry, the quality of the nation’s diet remains a key public health issue. Obesity related diseases cost the NHS in excess of £6bn per year and are calculated to impact wider society to the tune of £27bn per year.

Key actions recommended in the British Medical Association’s **Strategy for Improving the nation’s diet: Action for a healthier future** are to:

- supporting local authorities to create healthier food environments - Local authorities should have the necessary powers to ensure that the food environment everyone lives in is conducive to healthy eating;
- introduce a mandatory, standardised approach to food labelling to enable consumers to make informed choices – so when people buy food and drink, they can make informed choices;
- restricting children’s exposure to high fat, salt or sugar food promotion;
- using a range of fiscal measures and incentives to encourage healthy eating patterns – The BMI recommends taxing unhealthy food and drink including the introduction of a soft drinks industry levy including sugary milk drinks. Fiscal measures should also be used to make healthier options the cheaper options, through combining taxation on unhealthy products with subsidisation of healthier options;
- introducing regulatory backing for UK wide reformulation targets to reduce calorie, fat, saturated fat, salt and added sugar levels for high fat, salt or sugar products;
- providing adequate funding for public health services so they are able to respond to the needs of the populations they serve – to support local public health services and increase spending on adult obesity services; and
- ensuring a health and social care system that is capable of responding to the needs of overweight and obese adults and children.

The Department for Education’s **Skills for Jobs strategy: Lifelong Learning for Opportunity and Growth**, published in January 2021, outlines how the government seeks to reform further education to support the skills the economy and particular sectors such as the Food and Drink sector needs. Focusing on productivity and industry, the strategy puts employers at the heart of the system so that education and training leads to jobs that can improve productivity and fill skills gaps.

It focuses on skills and growth by committing to:

- investing in higher-level technical qualifications that provide a valuable alternative to a university degree.
- making sure people can access training and learning flexibly throughout their lives and are well-informed about what is on offer through great careers support.
- reforming funding and accountability for providers to simplify how funds are allocated, give providers more autonomy, and ensure an effective accountability regime which delivers value for money; and
- supporting excellent teaching in further education

Outlined in the **Skills for Jobs** case for change, the government acknowledges the crossroads of exiting the European Union and the labour it provided and the impact of the Covid-19 virus on businesses, growth and employment. It acknowledges that across a range of sectors, there is growing employer demand for the skills that higher technical education provides. The strategy reinforces how investing in these skills at both a local and a national level is critical to improving productivity and international competitiveness. The plan commits the government to building on current apprenticeships reforms to focus on employer needs and standards transformed apprenticeships, create the conditions for providers to deliver education and training that improves employment outcomes, providing greater clarity and predictability of funding for providers and more autonomy for how that funding is used; continuing to reform higher technical education, making it a true alternative to a degree by having a strong focus on quality assurance and delivering the training and education that employers want and creating the new Lifelong Loan Entitlement will support increased access to high-quality technical qualifications and bring greater parity between technical and academic education.

The government’s **Build back better: our plan for growth** was prepared in response to the Covid-19 pandemic and the UK’s exit from the EU and replaces the UK’s Industrial Strategy. It seeks to deliver growth by levelling up the UK, by tackle long-term problems in the UK, supporting the transition to net zero, and supporting the vision for a Global Britain. The plan for growth focuses on focuses on infrastructure, skills and innovation as the foundation of recovery and growth across the economy by:

- investing in high quality infrastructure which is crucial for economic growth, boosting productivity and competitiveness;
- improve people’s life chances by giving them the skills to succeed. The UK has a strong foundation of advanced skills, but lags behind international comparators on technical and basic adult skills. The government also commits to “building an apprenticeship revolution”, to ensure that they better meet the skills needs of employers; and

- supporting innovation which drives economic growth and creates jobs. In the plan, the government commits to a significant uplift in R&D investment and the creation of the Advanced Research & Invention Agency to fund high-risk, high-reward research and seeks to make the UK the best ecosystem in the world for starting and growing a business. That means having access to capital, skills and ideas, as well as a smart and stable regulatory framework.

The government acknowledges the large economic gap between the South-East and London and areas like Lancashire and seeks to uplift infrastructure investment and creating new skills training opportunities across the UK. Improving the UK's performance in areas such as Lancashire would help to close the productivity gap between the UK and other countries, and close productivity gaps within the UK.

Building on the government's Build Back Better plan for growth, the Department for BEIS' strategy **The UK Innovation Strategy: Leading the future by creating it**, sets out the government's long-term plan for delivering innovation-led growth. Its primary objective is to boost private sector investment across the whole of the UK, creating the right conditions for all businesses to innovate and giving them the confidence.

To achieve the aim of making the UK a global hub for innovation by 2035, the government's Strategy is based on four pillars: fuelling businesses who want to innovate; making the UK the most exciting place for innovation; ensuring research, development and innovation institutions serve the needs of businesses and places across the UK and stimulating innovation to tackle major challenges faced by the UK and the world and drive capability in key technologies.

The link between innovation and the Food and Agriculture industry is continuously made throughout the strategy, acknowledging how the sector can support the government's objectives. The Government has made a legal commitment to reduce the UK's carbon emissions to net zero by 2050 and pledged to ensure that 30% of land is protected for nature by 2030. The farming sector itself will have to become carbon neutral, something the National Farmers' Union has already committed to. But some areas of farmland will also have to be repurposed or adapted so that they actively sequester carbon, mopping up the emissions from those industries (such as air travel and heavy industry) that will still largely depend on fossil fuels for the foreseeable future; all this, while maintaining a steady supply of affordable food.

The Department for Business, Energy and Industrial Strategy's **Industrial Decarbonisation Strategy** (March 2021) set out the government's strategy to accelerate the green transformation in industry aiming to reduce emissions by around two thirds by 2035. The Strategy outlines the core role decarbonising UK industry and manufacturing plays as part of the government's ambitious plan for the green industrial revolution. The government's **Net Zero Strategy: Build Back Greener** outlines the delivery pathway across multiples sectors within the UK economy to achieve the government's net zero carbon budget by 2050. The Strategy promotes a fair and inclusive transition which includes enhancing adaptive capacity, strengthening resilience, and reducing vulnerability to climate change. The Department for Business, Energy and Industrial Strategy's **Clean growth strategy: Leading the way to a low carbon future** (October 2017) sets the government's growth agenda while cutting greenhouse gas emissions. Action to deliver clean growth can also have wider benefits. The key policies include accelerating clean growth; improving business and industry efficiency; improving homes; accelerating the shift to low carbon

transport; delivering clean, smart, flexible power; enhancing the benefits and value of natural resources. For example, the Strategy outlines the multiple co-benefit of cutting transport emissions is cleaner air, which has an important effect on public health, the economy, and the environment.

The **UK Food and Drink Industry’s Plan for Success** demonstrates that the Food and Drinks Industry is ready and willing to deliver economic growth, healthier consumption, environmental benefits and higher-skilled jobs that will benefit every community. The **‘Achieving Net Zero’: The Food and Drink Federation handbook** outlines how the FDF, and the food sector can address the challenge of Net Zero, and provides practical guidance for food and drink manufacturers, particularly those at the early stages of developing their climate strategy. The UK Government has notably already developed an **Industrial Decarbonization and Energy Efficiency roadmap for the food and drink manufacturing sector**, outlining time-bound actions to be taken in relation to heat electrification, biomass, heat recovery and heat recovery. However, as the roadmap was published in 2015, it is aligned with the nation’s previous climate target of an 80% reduction in net emissions by 2050, against a 1990 baseline.

Recognising the impact of the Food and Agricultural industries as a major contributor to the UK’s waste and landfill issue, the government has announced the introduction of a plastic packaging tax from April 2022, set at £200 per tonne on plastic packaging which does not meet a minimum threshold of at least 30% recycled content. The **UK’s Plastics Pact** brings together businesses in the industry to tackle the level of plastic waste in the across the food and drink industry and supply chain in the UK. With the overall ambition of reducing the environmental impact of the industry, reduce waste and create a circular economy for plastics, pact members will eliminate problematic plastics reducing the total amount of packaging on supermarket shelves, stimulate innovation and new business models and help build a stronger recycling system in the UK. In the **Roadmap to 2025: The UK Plastics Pact**, updated in December 2020, a framework is created for all businesses to deliver ambitious reduction targets.

The UK Plastics Pact targets are as follows:

- eliminate problematic or unnecessary single-use packaging through redesign, innovation or alternative (reuse) delivery model;
- 100% of plastics packaging to be reusable, recyclable or compostable;
- 70% of plastics packaging effectively recycled or composted; and
- 30% average recycled content across all plastic packaging.

Local

The Food and Agriculture industries operating within Lancashire supports a number of important policies for the area. Table A2.2 sets out the contribution of the Food and Drinks sector with various strategies and policies at a regional and local level.

Table A2.2: Local policy context	
Local policy	Relation to F&A sector
<p>Lancashire’s Draft Local Industrial Strategy, Lancashire Enterprise Partnership August 2019 – The evidence base for Lancashire’s LIS was published in August 2019 and sets out key economic data on Lancashire’s economic performance and trajectory; identifies Lancashire’s key strengths, weaknesses, opportunities and threats; and supports the selection and development of policies and priorities to drive productivity in Lancashire.</p>	<p>The GVA and employment specialisms are highlighted in the evidence base with manufacturing, including food and drinks manufacturing and agriculture. In terms of employment manufacturing stands out as particularly significant showing the importance of the food and drinks and wider agricultural sectors to Lancashire’s economy.</p> <p>The evidence highlights the drivers of the F&A sector in Lancashire including digitalisation programmes for businesses, and the importance of local programmes such as Made Smarter in manufacturing, and training for workers, e.g. the Digital Skills Partnership, to build agility, adaptability, and resilience in the economy. The evidence base also highlights many major challenges to the food and drinks industry including major technology & market drivers are disrupting markets, sectors, and supply chains and economic forecasts.</p> <p>The evidence base also shows a forecast in decline in the following high-value sectors including manufacturing and decline in the sector such as agriculture.</p>
<p>Lancashire Authorities, Redefining Lancashire: Our Approach to Recovery sets out the first steps of Lancashire’s Covid-19 Recovery Plan, setting out Lancashire’s economic priorities. The document builds on immediate Central Government support for re-opening the economy and sets the context within which the Greater Lancashire Plan will capture the county’s long-term growth aspirations.</p>	<p>As a consequence of the impact of Covid-19, Lancashire’s entire economic base was adversely affected. In particular, manufacturing which encompasses parts of the F&A sector is identified as a sector at risk of irreparable damage.</p> <p>The programmes announced in the Recovery Plan are relevant to the F&A sector, in particular the priorities and programmes related to developing local supply chains and funding to support reshoring and adaptation of manufacturing. The target sectors prioritised in the Recovery Plan include food production, energy, agriculture and advanced manufacturing.</p>
<p>The draft Lancashire Plan: Our commitment to Work Together – sets out the five core themes of the Lancashire Combined Authority. The themes are:</p> <ul style="list-style-type: none"> • Prosperous Lancashire - Where Lancashire is recognised as place of opportunity for all and a destination of choice, to do business in, live or visit. • Connected Lancashire - Where Lancashire possesses the digital and transport 	<p>The draft Lancashire Plan shows the strength of the Food and Drinks sector in Lancashire and shows it is in a very strong position to contribute to all of the growth areas highlighted in the Governments’ Industrial Strategy as it invests in science, research and innovation, including manufacturing and energy technologies.</p> <p>The Plan commits to ensuring that the LEP positions Lancashire’s wider economic importance to the</p>

<p>infrastructure and connectivity to promote inclusive growth.</p> <ul style="list-style-type: none"> • Skilled Lancashire - Where Lancashire creates the skilled workforce which can meet the demands of employers and future business growth and deliver economic inclusion for its population. 	<p>delivery of national growth objectives such as Northern Powerhouse as well as in closing productivity gaps in key sectors such as advanced manufacturing including food and drink manufacturing.</p>
<p>Central Lancashire Economic Regeneration Strategy 2026 – sets out the priorities for economic development for the three authorities of South Ribble, Preston and Chorley. The vision for central Lancashire is by 2026 to be <i>“recognised as a highly sought-after place to live and work in the Northwest. It offers excellent quality of life to all its residents. It will play a leading role in Lancashire’s world class economy and have sustainable economic growth based on the area’s unique assets. Its central location at the hub of the transport network, its green spaces and access to open countryside make it a place with ‘room to breathe”.</i></p>	<p>The vision of creating a strong and prosperous economy in Lancashire will support F&A sector by:</p> <ul style="list-style-type: none"> • Delivering targeted support to grow strong local sectors • Generating and sustaining new business starts and increasing inward investment • Supporting a viable rural economy including diversification and increasing food security • Increasing energy efficiency in businesses through promotion of energy efficient design <p>Food Security is a vital part of the Regeneration Strategy as it emphasises the need for local food production to be increased to reduce reliance on imported food supplies, reduce the distances that food is transported, improve food quality for local people, increase the resilience of Central Lancashire to food shortages and provide jobs for people, allowing people the opportunity to remain in rural communities. To support the economic growth of rural areas in Lancashire, the Regeneration Strategy emphasises the need of diversification of agriculture to increase food security and to secure existing jobs and provide new jobs.</p> <p>Skill levels in Lancashire are also an important priority to ensure a fit between the skills available and employer requirements. The food and drinks sector will benefit from the education and training provision in Central Lancashire delivers the current and future skills needed by employers.</p>
<p>Lancashire Skills and Employment Strategic Framework 2021 Refresh, Lancashire Technical Vision - sets out the county’s skills and employment priorities. It sets out the vision for Lancashire which is <i>“by 2030 our Technical Education System will grow the productivity of Lancashire’s businesses, anticipating and responding to the skills requirements of market and technology change”.</i></p>	<p>The Technical Education system will support the Food and Drinks sectors by growing the productivity of Lancashire’s workers and businesses and seeks to anticipate and respond to market & technology change, with provision driven by employer demand in the Food and Drink sector. This supports the overall vision of achieving a skilled employment base who are both academically and/or technically knowledgeable.</p>

<p>It sets out the priorities of creating a network of high-quality provision of vocational qualifications and apprenticeships and will continue to respond to growing and emerging technical skills needs within the Foods and Drink industry.</p>	<p>The Skills and Employment Framework and Vision places an emphasis on developing skills to match skills gaps identified by employers. The framework has utilised industry specific groups to advise on college developments and plans, including the recently opened Food/ Farming Innovation and Technology Centre (FFIT). The members of the Agriculture Technical Advisory Group, with expertise across the livestock, dairy and technological sectors, all input into the design of the Livestock Innovation Centre.</p>
<p>Lancashire Health and Wellbeing Strategy - This strategy has been developed by Lancashire's Health and Wellbeing Board. The ambition for the strategy is that it will enable Lancashire to work better together to deliver real improvements to the health and wellbeing of Lancashire's citizens and communities. This strategy sets out the desired goals until the year 2020 and has not been updated in light of Covid-19.</p>	<p>The Food and Drinks sector is a core element of Lancashire which seeks to address health inequalities. In Lancashire, the F&A sector is uniquely placed to help tackle issues outlined in the strategy including reducing unemployment, increasing income and reducing child poverty and deliver improvements in health and wellbeing' for the people in Lancashire.</p>

Appendix 3 - Literature Review

Introduction

Understanding the drivers of Lancashire’s Food and Agriculture sectors, in terms of employment, growth and productivity, is key to understanding the direction skills and employment providers need to take to best address local and national need. A key part of the Lancashire Skills and Employment Strategic Framework is forward-looking to ensure future prosperity and creating a workforce and industries that are fit for the future. To inform our approach to gathering LMI, a literature review has been undertaken to gather relevant research and evidence on the future trends in Food and Agriculture sector and the implications of net zero and industrial digitalisation on productivity and Lancashire’s future businesses and workforce.

Net Zero and circular economy

The global food system has a huge environmental impact and is a significant contributor to the current climate crisis. Food and drink production accounts for between 14-30% of global greenhouse gas emissions, generates an enormous amount of waste and pollution, and contributes to the degradation of natural resources such as air, water and soil quality, wildlife and biodiversity.

The Food and Agriculture industry is the UK’s largest manufacturing sector, and in 2019 was responsible for 165 million tonnes of carbon emissions covering all food and drink consumed or produced in the UK. This equates to about 17% of the UK’s carbon footprint. Although greenhouse gas emissions are generated from all stages of the food supply chain, the majority of emissions (80-86%) are associated with food production and agriculture.

Energy-intensive production methods including the use and manufacture of agro-chemicals, inefficient soil management that releases rather than absorbs greenhouse gas emissions, slurry storage and factory farming of animals are major causes of GHG emissions and contribute significantly to climate change, water pollution, soil erosion, biodiversity loss and poor animal welfare. Livestock’s contribution to climate change is particularly significant accounting for up to 18% of food system GHG emissions.

The impact of food transportation on the environment and climate change is also significant: The UK is heavily dependent on imported food, currently importing 47% of total food products, and 95% of fruit in 2018. The majority of this food is distributed via centralised supply networks and is processed, manufactured and retailed by large multi-national companies. Current food transportation contributes to air pollution, traffic congestion and GHG emissions. Food transport in the UK, for example, accounting for 19 million tonnes of carbon equivalent emissions in 2002. The UK’s reliance on imported food threatens future food security as our ability to import sufficient quantities of food in the future is vulnerable to climate change, peak oil, rising world population, shifting dietary preference for meat and dairy and increased price volatility. These are some of the substantial short- and medium-term risks of a poorly prepared sector with serious adverse impacts on productivity and workforce predicted.

The Food and Agriculture industries is possibly one of the best placed to deal with a move to a Low Carbon economy. As it remains one of the highest energy users in the UK there are real opportunities to cut costs, energy use and carbon emissions. In Lancashire, there has been an 33% decline in industrial carbon dioxide emissions since 2010. However, agriculture is the one main industry where carbon dioxide emissions have increased over the last ten years. From 2010 to 2020, agricultural carbon dioxide emissions have risen by 12.2% from 71.8kt cO₂ to 80.5Kt Co₂.

A net-zero transition would entail a significant shift in demand, capital allocation, costs and jobs with considerable impacts on sector productivity. McKinsey Sustainability outlines the scale of capital funding necessary to produce more efficient-farming and forecasts the reallocation of jobs in the agriculture and food sectors as consumer food preferences change and the world responds to emerging needs.

As well as contributing to climate change, food production systems are, in turn, vulnerable to climate change impacts; The Intergovernmental Panel for Climate Change (2020) predicts negative impacts on global food production as a result of the increase in extreme weather events such as flooding and heat waves, threatening global food security. Low Carbon investment is vital as there is an increased focus throughout industry on level of emissions, environmental impact and rising energy costs with businesses increasingly having to address climate change, coupled with an increasing regulatory burden.

Other major environmental impacts of the food supply chain are associated with food waste and food packaging. Globally 1.3 billion tonnes of food is wasted each year. In the UK approximately 30% of all food produced is wasted along various stages of the food supply chain with 9.5 million tonnes of household food waste a year in the UK, almost three quarters is food which is edible. Research by WRAP found the food that could have been eaten (6.4 Mt) would make the equivalent of over 15 billion meals – enough to feed the entire UK population 3 meals a day for 11 weeks.

Aside from the environmental benefits of the decarbonisation of the UK's food and agricultural industry, the UK's Food and Drink Federation recommends that more is done to “harness the benefits of a circular economy” through future policies on innovation and resource efficiency. Food consumed in the UK is responsible for approximately 30% of the UK's greenhouse gas emissions. Beyond emissions, the food and drink sector is responsible for huge amounts of packaging waste, amounting to over 100,000 tonnes. The sector also uses vast quantities of water and the precious natural resources that go into our food and drink are wasted when it is thrown away.

The food industry is very resource-intensive – globally, 70% of global freshwater is used for agricultural purposes while in the UK, the food and drink manufacturers are the fourth highest industrial energy user. UN projections are that global demand for fresh water will exceed supply by 40% by 2030. The UK is a major importer of food and is vulnerable to the consequences of wasteful, for example, 8 out of the top 10 countries that the UK sources fruit and vegetables from are drought prone. Security of supply in this context is a real commercial – and national – concern for the UK food and drink sector. Suppliers need the means to become more resilient to water pressures. This can mitigate future risks – but also have positive effects. For example, it is estimated that better water management could boost crop production by 20% globally.

The UN's Sustainable Development Goal 12.3 is to halve food waste by 2030. To achieve this in the UK, further reductions in food waste of 1.8 Mt are needed, 1.3 Mt from homes and over half a million tonnes from across the supply chain. At present, 88% of the sector's carbon footprint occurs within the supply chain, in which research by WRAP has found that “For every £1 invested in waste reduction, a £14 yield is returned.”

The UK's current food industry is wasteful in terms of money and resources, but the food that is diverted into landfill produces methane - a powerful greenhouse gas that contributes to climate change. A recent study by the Ellen MacArthur Foundation found that embedding circular economy principles within the global agri-food sector could contribute \$2.7trn (£2.1trn) to the UK economy through decreased healthcare, resource and environmental restoration costs.

Industrial digitalisation

While the COVID-19 crisis showed the Food and Agriculture industry's ability to adapt at pace when needed and the potential to apply that clarity of vision and purpose to the other huge challenges faced by the sector, it also highlighted the vulnerabilities of the sectors and the areas which were ill prepared to respond to rapid changes. COVID-19 has, in particular, accelerated the demands on the Food and Agriculture's digital infrastructure, increased the automation and efficiency of tasks and led to and a need to reduce carbon emissions.

Digitalisation, or the adoption of digital technologies and incorporation of digital information by industries, is an increasing vital prerequisite to high productivity in the Food and Agriculture sectors. More and more, only by turning meaningful data into information can businesses and employers make informed, effective decisions at pace. Digitalisation means access to more timely, granular and high-quality data which helps businesses respond faster and better to customer needs, supply chain requirements and challenges.

There is now widespread industry recognition of how better use of data will be instrumental to driving productivity gains. In the UK, overall productivity has remained flat over the past decade. The UK has underperformed nearly all the G7 countries (16% lower) in terms of productivity. For example, a worker in the UK produces 10% less value than an Italian worker, almost 30% less than a French or US worker and more than 30% less than the average German employee for the same hours worked. In 2020, Defra reported that the UK's agriculture is three times less efficient than other sectors of the UK economy. Within the UK, the long-term historical trend in agriculture has been one of declining employment and rising productivity. However, the underlying rate of productivity growth has fallen over time and has been particularly weak (near zero) through the past decade. Productivity growth is projected to remain weak in the short term but to strengthen thereafter, to average around 1% pa in the long term.

In England, almost 4 million hectares of soil are at risk of compaction, over 2 million hectares of soil are at risk of erosion, intensive agriculture has caused arable soils to lose about 40 to 60% of their organic carbon and soil degradation was calculated in 2010 to cost £1.2 billion the economy every year. Automation and digitalisation are essential to the Food and Agriculture sectors need to increase productivity to meet food supply demands. The United Nations' Food and Agriculture Organisation has said food production will need to increase by 70% by 2050 to feed a growing global population. When it comes to meat production, the World Health Organisation has

estimated that meat production needs to increase to 376 million tonnes by 2030. Demand for food is growing at the same time the supply side faces constraints in land and farming inputs. According to UK government estimates, UK soil contains about 10 billion tonnes of carbon, roughly equal to 80 years of annual greenhouse gas emissions. Intensive agriculture has caused arable soils to lose 40 to 60% of their organic carbon, and the impacts of climate change pose further risks to food production and agriculture. The impacts are already experienced by the agriculture industry as heat production in the UK decreased by 38%, from 16.2 million tonnes in 2019 to 10.1 million tonnes in 2020. The UK yield of 7.2 tonnes per hectare is lower than the five-year average of 8.4 tonnes per hectare.

A £24 million package by government to boost Agritech is indicative of the need for change – and government’s support of new technologies. In economic terms, DEFRA estimated that digitalisation and automation could raise productivity growth on a global basis by as much as 0.8 to 1.4 percent annually.

The potential of digital transformation to boost productivity is vast. Digital technologies give firms new tools to design, produce and sell goods and services, and provide individuals with new ways for economic interactions. For instance, recent OECD evidence shows that a 10-percentage point increase in the sector-wide adoption rate of cloud computing is associated with a 3.5% productivity increase for the average European firms after five years (Gal et al., 2019). Furthermore, complementary investment in skills and factors such as software and data may be necessary to reap the benefits of digitalisation (e.g. van Ark, 2016; Brynjolfsson and McAfee, 2011). The productivity premium is decomposed into a direct effect benefitting the firms actually increasing their digital intensity, and an indirect effect of belonging to a sector with high digital intensity. The firm-level productivity premium of being an adopting firm is consistently positive and sizeable across different digital technologies and measures of skill intensity.

The COVID-19 pandemic has added new opportunities for accelerating productivity-enhancing digitalisation. For instance, lockdowns and social distancing requirements have increased the use of digital platforms in the Food and Agriculture industry (OECD, 2020), raising resilience during the crisis and foreshadowing future productivity benefits, especially for SMEs and less productive firms. As government policy seeks to accelerate the diffusion and uptake of digital technologies across all industries, it is increasingly important within the Food and Agriculture sectors. In terms of productivity, Gal et al. (2020) paper on digitalisation and productivity found that industry-level digital adoption is associated with significant productivity returns at the firm level. There is further evidence that the productivity gains gained by digitalisation do not systematically depend on firm size. The relationship between the adoption of digital technology and productivity is complex as digital technologies typically support productivity in combination with other factors such as labour skill levels (human capital) and regulatory environment. However, there is considerable evidence that productivity benefits of digital adoption are significantly thwarted by skill and occupational shortages. Digitalisation is found to be on average more beneficial in manufacturing sectors, including the food manufacturing than service industries (Akerman, Gaarder and Mogstad, 2013[18]; Dhyne et al., 2018).

As shown by Andrews et al. (2018), both capabilities (e.g. enhancing managerial and digital-friendly skills) and incentives (e.g. reducing entry and exit barriers) are relevant to stimulate digital adoption. Moreover, certain drivers of digital adoption are also likely to support the

performance of lagging firms (e.g. widening the skill pool, improving access to financing, reducing entry barriers to certain markets). Enhancing skills is particularly important in this respect, as lagging firms are more affected by skill shortages than more productive firms. Ensuring workers have an opportunity to acquire and upgrade their skills needed to thrive in an increasingly digitally focused Food and Agriculture industry. Boosting adult learning programmes and on-the-job training schemes, and better integrating digital tools into school and apprentice courses are key steps.

Appendix 4 – Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley Travel to Work Area

Key points

- In 2021, the GVA of the F&A in the Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley TTWA was £425 million. This represented a decline of 5.6% in comparison to the GVA of the F&A sector in 2010, the largest decline of all of Lancashire’s TTWAs.
- This decline in the GVA of the Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley TTWA’s F&A sector was driven by a decline in the GVA of Rossendale’s F&A sector, which declined by over a quarter from 2010 to 2021.
- The number of F&A businesses in Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley was 2,085 in 2021.
- The Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley TTWA has the highest number of F&A businesses of all TTWAs in Lancashire.
- The growth rate in the number of F&A businesses in the Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley TTWA also outpaced all other Lancashire TTWAs at 16.2% during the period 2010 to 2021.
- Employment in the Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley TTWA stood at 13,848, above all other Lancashire’s TTWA.
- Employment in the Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley TTWA declined by 5.1% from 2010 to 2021. This decline was the largest of all TTWA in Lancashire, and was driven by a decline in employment in Rossendale of almost 18% during the same period.
- As proportion of total employment, employment in the Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley TTWA was 8.4% in 2021, considering lower than other TTWA in Lancashire.
- The productivity of the Blackburn w. Darwen, Hyndburn, Rossendale, Ribble Valley TTWA F&A sector stood at £30,720, which represented a decline of 0.5% from the 2020 productivity level.

Economic Output

Table A4.1: Food and Agriculture sector GVA (£m, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley	450	536	425	-5.6%
Blackburn with Darwen	161	182	156	-3.2%
Hyndburn	57	87	66	16.9%
Rossendale	91	86	66	-26.9%
Ribble Valley	142	181	137	-3.6%
Lancashire LEP area	1,911	2,380	2,061	7.9%
North West	8,429	9,194	7,908	-6.2%
UK	85,043	93,041	83,004	-2.4%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A4.2: Food and Agriculture sector proportion of total GVA (%)			
	2010	2015	2021
Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley	7.0%	7.4%	5.9%
Blackburn with Darwen	6.2%	6.0%	5.1%
Hyndburn	5.0%	6.2%	4.8%
Rossendale	8.8%	7.8%	6.3%
Ribble Valley	8.7%	10.5%	7.9%
Lancashire	7.2%	8.0%	6.8%
North West	5.8%	5.8%	4.9%
UK	5.8%	5.7%	5.1%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A4.3: Food and Agriculture sub-sector GVA, as % of total GVA, 2021							
	Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley	Blackburn with Darwen	Hyndburn	Rossendale	Ribble Valley	Lancashire	UK
Agriculture, forestry & fishing	0.5%	0.3%	0.4%	0.7%	0.7%	0.6%	0.7%
Food & beverage services	1.2%	1.0%	1.1%	1.1%	1.5%	1.5%	1.6%
Food, beverage & tobacco manufacturing	2.2%	1.7%	1.0%	2.1%	4.2%	2.9%	1.8%
Food retail	0.4%	0.3%	0.6%	0.4%	0.2%	0.4%	0.3%
Food wholesale	1.6%	1.7%	1.7%	1.9%	1.2%	1.4%	0.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Business Base

Table A4.4: Food and Agriculture sector businesses				
	2010	2015	2021	Change 2010 – 2021 (%)
Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley	1,795	1,980	2,085	16.2%
Blackburn with Darwen	465	545	600	29.0%
Hyndburn	305	300	320	4.9%
Rossendale	280	325	365	30.4%
Ribble Valley	745	810	800	7.4%
Lancashire LEP area	7,250	7,840	8,060	11.2%
North West	28,865	31,640	34,380	19.1%
UK	308,720	334,905	353,425	14.5%

Source: Business Count data, ONS

Table A4.5: Food and Agriculture sector businesses as proportion of total businesses (%)			
	2010	2015	2021
Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley	16.1%	16.1%	15.2%
Blackburn with Darwen	7.3%	6.9%	6.4%
Hyndburn	6.4%	7.8%	7.5%
Rossendale	11.0%	8.1%	9.7%
Ribble Valley	14.8%	20.7%	19.3%
Lancashire	15.9%	15.9%	14.9%
North West	14.1%	13.4%	12.7%
UK	14.7%	13.7%	12.8%

Source: Business Count data, ONS

Table A4.6: Food and Agriculture sector businesses by size, %				
	0-9	10-49	50-249	250+
Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley	89%	11%	0%	0%
Blackburn with Darwen	89.1%	10.9%	0.0%	0.0%
Hyndburn	90.5%	9.5%	0.0%	0.0%
Rossendale	91.9%	8.1%	0.0%	0.0%
Ribble Valley	87.6%	11.8%	0.6%	0.0%
Lancashire LEP area	86.4%	12.3%	1.1%	0.2%
Lancashire LEP area (all sectors)	88.3%	9.7%	1.7%	0.4%

Source: Business Count data, ONS

Employment

Table A4.7: Food and Agriculture sector employment				
	2010	2015	2021	Change 2010 – 2021 (%)
Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley	14,589	14,861	13,848	-5.1%
Blackburn with Darwen	5,065	5,004	5,042	-0.5%
Hyndburn	2,237	2,735	2,423	8.3%
Rossendale	2,578	2,305	2,127	-17.5%
Ribble Valley	4,710	4,816	4,256	-9.6%
Lancashire LEP area	66,596	69,830	69,980	5.1%
North West	306,460	328,685	327,749	6.9%
UK	2,890,389	3,097,486	3,159,592	9.3%

Source: Business Register Employment Survey

Table A4.8: Food and Agriculture sector employment, % of total employment			
	2010	2015	2021
Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley	9.2%	9.0%	8.4%
Blackburn with Darwen	7.7%	6.9%	6.9%
Hyndburn	7.5%	8.4%	7.2%
Rossendale	10.0%	8.4%	8.3%
Ribble Valley	12.9%	14.7%	12.9%
Lancashire LEP area	9.6%	9.9%	9.6%
North West	9.0%	9.2%	8.7%
UK	9.2%	9.2%	9.0%

Source: Business Register Employment Survey

Table A4.9: Food and Agriculture sub-sector employment, as % of total, 2021

	Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley		Blackburn with Darwen		Hyndburn		Rossendale		Ribble Valley		Lancashire	UK
	No.	%	No.	%	No.	%	No.	%	No.	%	%	%
Agriculture, forestry & fishing	1,336	0.8%	325	0.4%	225	0.7%	300	1.2%	486	1.5%	5.2%	5.8%
Food & beverage services	6,389	3.9%	2,391	3.3%	1,166	3.5%	884	3.5%	1,949	5.9%	2.2%	1.3%
Food, beverage & tobacco manufacturing	2,816	1.7%	919	1.3%	233	0.7%	393	1.5%	1,271	3.9%	1.8%	1.4%
Food retail	1,415	0.9%	561	0.8%	417	1.2%	228	0.9%	209	0.6%	1.0%	0.9%
Food wholesale	1,891	1.1%	847	1.2%	381	1.1%	322	1.3%	342	1.0%	0.8%	5.0%

Source: Business Register Employment Survey

Productivity

Table A4.10: Food and Agriculture sector GVA per employment (£, 2018 prices)

	2010	2015	2021	Change 2010 – 2021 (%)
Blackburn w. Darwen, Hyndburn, Rossendale, Ribble Valley	£30,879	£36,073	£30,720	-0.5%
Blackburn with Darwen	£31,844	£36,297	£30,966	-2.8%
Hyndburn	£25,365	£31,852	£27,378	7.9%
Rossendale	£35,213	£37,238	£31,194	-11.4%
Ribble Valley	£30,086	£37,678	£32,095	6.7%
Lancashire LEP	£28,691	£34,085	£29,456	2.7%
North West	£27,505	£27,972	£24,128	-12.3%
UK	£29,423	£30,038	£26,270	-10.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A4.11: Food and Agriculture sector GVA per employment as % of local GVA per employment

	2010	2015	2021
Blackburn w. Darwen, Hyndburn, Rossendale, Ribble Valley	76.3%	82.0%	69.8%
Blackburn with Darwen	80.6%	87.0%	73.5%
Hyndburn	66.9%	73.6%	65.9%
Rossendale	87.9%	92.1%	75.2%
Ribble Valley	67.4%	71.3%	61.0%
Lancashire LEP	75.1%	80.9%	70.4%
North West	64.1%	62.6%	56.2%
UK	63.6%	62.5%	56.6%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Appendix 5 - Blackpool, Fylde and Wyre Travel to Work Area

Key points

- The GVA of the Blackpool, Fylde and the Wyre TTWA experienced positive growth for the period 2010-2021, growing 4.1% to £462million. The local authority of Fylde within the Blackpool, Fylde and the Wyre TTWA experienced the highest GVA growth of all local authorities at 26.9% and contributed to the positive growth across the TTWA.
- The GVA of the F&A sector in the Blackpool, Fylde and the Wyre TTWA as a proportion of the area's total GVA was 7.3%. This share of total GVA was larger than all other Lancashire TTWAs, with the Food, beverage & tobacco manufacturing being largest subsector in Lancashire's F&A sector in terms of generating GVA.
- In comparison to other Lancashire TTWA, there is a large number of F&A sector businesses in the Blackpool, Fylde and Wyre TTWA. In total, there were 1,785 F&A sector businesses in 2021, an increase of almost 10% since 2010.
- As a proportion of total businesses in the Blackpool, Fylde and Wyre TTWA, the F&A also dominates when compared to other Lancashire TTWA businesses with 16% of businesses operating in the F&A sector. This figure is driven by Wyre, where almost one fifth of all business in the local authority are in the F&A sector.
- The size of the F&A businesses in the Blackpool, Fylde and Wyre TTWA are relatively small, with 87% of all businesses micro-sized employing 0-9 employees.
- The number of people employed in the F&A sector within the Blackpool, Fylde and Wyre TTWA stood at 17,000 in 2021, above all other TTWAs in Lancashire.
- The number of people employed in the F&A sector in the Blackpool, Fylde and Wyre TTWA increased by 10.1%. This growth was driven by the growth in employment in Fylde's F&A sector. In Fylde, over 1 in 4 people employed are employed in the F&A industry.
- As a proportion of total employment, the number of people employed in the F&A sector in the Blackpool, Fylde and Wyre TTWA was above all other comparator area at 10.9% in 2021, with the exception of West Lancashire.
- Productivity in the Blackpool, Fylde and Wyre TTWA stood at £27,185 in 2021, a decline of 5.4% since 2010 productivity levels. The decline in productivity outpaced all TTWA areas in Lancashire during the same period.

Economic Output

Table A5.1: Food and Agriculture sector GVA (£m, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
Blackpool, Fylde and Wyre	444	552	462	4.1%
Blackpool	201	233	197	-2.0%
Fylde	108	147	137	26.9%
Wyre	135	172	128	-5.0%
Lancashire LEP area	1,911	2,380	2,061	7.9%
North West	8,429	9,194	7,908	-6.2%
UK	85,043	93,041	83,004	-2.4%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A5.2: Food and Agriculture sector proportion of total GVA (%)			
	2010	2015	2021
Blackpool, Fylde and Wyre	7.2%	8.3%	7.3%
Blackpool	8.6%	9.3%	7.6%
Fylde	4.9%	5.8%	6.4%
Wyre	8.1%	10.8%	8.0%
Lancashire	7.2%	8.0%	6.8%
North West	5.8%	5.8%	4.9%
UK	5.8%	5.7%	5.1%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A5.3: Food and Agriculture sub-sector GVA, as % of total GVA, 2021						
	Blackpool, Fylde and Wyre	Blackpool	Fylde	Wyre	Lancashire	UK
Agriculture, forestry & fishing	0.6%	0.3%	0.6%	1.0%	0.6%	0.7%
Food & beverage services	2.0%	2.5%	1.4%	2.2%	1.5%	1.6%
Food, beverage & tobacco manufacturing	3.5%	3.6%	3.7%	3.1%	2.9%	1.8%
Food retail	0.4%	0.4%	0.3%	0.5%	0.4%	0.3%
Food wholesale	0.8%	0.8%	0.5%	1.2%	1.4%	0.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Business Base

Table A5.4: Food and Agriculture sector businesses				
	2010	2015	2021	Change 2010 – 2021 (%)
Blackpool, Fylde and Wyre	1,630	1,715	1,785	9.5%
Blackpool	440	460	520	18.2%
Fylde	410	430	455	11.0%
Wyre	780	825	810	3.8%
Lancashire LEP area	7,250	7,840	8,060	11.2%
North West	28,865	31,640	34,380	19.1%
UK	308,720	334,905	353,425	14.5%

Source: Business Count data, ONS

Table A5.5: Food and Agriculture sector businesses as proportion of total businesses (%)			
	2010	2015	2021
Blackpool, Fylde and Wyre	16.0%	16.1%	15.7%
Blackpool	12.7%	12.9%	13.3%
Fylde	14.0%	14.1%	13.7%
Wyre	20.6%	20.4%	19.6%
Lancashire	15.9%	15.9%	14.9%
North West	14.1%	13.4%	12.7%
UK	14.7%	13.7%	12.8%

Source: Business Count data, ONS

Table A5.6: Food and Agriculture sector businesses by size, %				
	0-9	10-49	50-249	250+
Blackpool, Fylde and Wyre	87%	13%	0%	0%
Blackpool	83.5%	15.5%	0.0%	1.0%
Fylde	86.8%	13.2%	0.0%	0.0%
Wyre	88.3%	11.1%	0.6%	0.0%
Lancashire LEP area	86.4%	12.3%	1.1%	0.2%
Lancashire LEP area (all sectors)	88.3%	9.7%	1.7%	0.4%

Source: Business Count data, ONS

Employment

Table A5.7: Food and Agriculture sector employment				
	2010	2015	2021	Change 2010 – 2021 (%)
Blackpool, Fylde and Wyre	15,442	16,816	17,000	10.1%
Blackpool	6,927	7,409	7,640	10.3%
Fylde	3,580	4,350	4,535	26.7%
Wyre	4,935	5,057	4,825	-2.2%
Lancashire LEP area	66,596	69,830	69,980	5.1%
North West	306,460	328,685	327,749	6.9%
England	2,890,389	3,097,486	3,159,592	9.3%

Source: Source: Business Register Employment Survey

Table A5.8: Food and Agriculture sector employment, % of total employment			
	2010	2015	2021
Blackpool, Fylde and Wyre	9.9%	11.0%	10.9%
Blackpool	10.8%	11.1%	10.6%
Fylde	7.7%	9.2%	9.9%
Wyre	10.8%	13.2%	12.7%
Lancashire LEP area	9.6%	9.9%	9.6%
North West	9.0%	9.2%	8.7%
England	9.2%	9.2%	9.0%

Source: Source: Business Register Employment Survey

Table A5.9: Food and Agriculture sub-sector employment, as % of total, 2021										
	Blackpool, Fylde and Wyre		Blackpool		Fylde		Wyre		Lancashire	UK
	No.	%	No.	%	No.	%	No.	%	%	%
Agriculture, forestry & fishing	1,439	0.9%	331	0.5%	464	1.0%	644	1.7%	5.2%	5.8%
Food & beverage services	9,566	6.1%	4,774	6.6%	2,191	4.8%	2,601	6.8%	2.2%	1.3%
Food, drink & tobacco manu.	3,843	2.5%	1,609	2.2%	1,372	3.0%	862	2.3%	1.8%	1.4%
Retail trade	1,332	0.9%	602	0.8%	335	0.7%	395	1.0%	1.0%	0.9%
Wholesale trade	820	0.5%	324	0.5%	173	0.4%	323	0.8%	0.8%	5.0%

Source: Business Register Employment Survey

Productivity

Table A5.10: Food and Agriculture sector GVA per employment (£, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
Blackpool, Fylde and Wyre	£28,750	£32,837	£27,185	-5.4%
Blackpool	£28,975	£31,474	£25,732	-11.2%
Fylde	£30,179	£33,861	£30,235	0.2%
Wyre	£27,398	£33,954	£26,618	-2.8%
Lancashire LEP	£28,691	£34,085	£29,456	2.7%
North West	£27,505	£27,972	£24,128	-12.3%
UK	£29,423	£30,038	£26,270	-10.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A5.11: Food and Agriculture sector GVA per employment as % of local GVA per employment			
	2010	2015	2021
Blackpool, Fylde and Wyre	72.5%	75.4%	66.9%
Blackpool	79.9%	84.1%	71.9%
Fylde	63.5%	62.9%	64.1%
Wyre	75.0%	81.7%	63.4%
Lancashire LEP	75.1%	80.9%	70.4%
North West	64.1%	62.6%	56.2%
UK	63.6%	62.5%	56.6%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Appendix 6 - Burnley and Pendle Travel to Work Area

Key points

- The GVA of Burnley and Pendle’s Food and Agriculture sector stood at £246million, which is relatively low when compared to other TTWAs.
- From 2010 to 2021, the rate of growth of Burnley and Pendle’s GVA outpaced all other TTWAs in Lancashire at 20.6%. This growth was especially evident in the local authority of Burnley where GVA growth of 26% was only outpaced by Fylde.
- In 2021, there were 770 Food and Agriculture sector businesses in the Burnley and Pendle TTWA. In total, the number of F&A businesses as a proportion of total businesses was 13.7%, which is slightly smaller than the Lancashire average.
- The F&A businesses base in Burnley and Pendle is characterised by a dominance of micro-sized businesses. In total, 91% of businesses are considered micro-sized, employing 1-9 people. On average, the size of F&A businesses in Burnley and Pendle is smaller than other comparator TTWA in Lancashire.
- Employment in Burnley and Pendle’s F&A sector stood at 7,403 in 2021, an increase of 11.4% from the level of employment in 2010. This growth in employment was considerably higher than the majority of other TTWA in Lancashire and was only outpaced by Lancaster and Morecambe.
- The productivity of Burnley and Pendle’s F&A sector was £33,236 in 2021, significant above all other TTWAs in Lancashire. The growth in productivity was also high when compared with other TTWA, who on average experienced negative productivity growth from 2010 to 2021.
- The productivity of Burnley and Pendle’s, as a share of the total productivity of the TTWA, was 76%, with both local authorities of Burnley and Pendle having the highest proportion of all other local authorities.

Economic Output

Table A6.1: Food and Agriculture sector GVA (£m, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
Burnley and Pendle	204	268	246	20.6%
Burnley	93	112	107	14.3%
Pendle	111	156	139	26.0%
Lancashire LEP area	1,911	2,380	2,061	7.9%
North West	8,429	9,194	7,908	-6.2%
UK	85,043	93,041	83,004	-2.4%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A6.2: Food and Agriculture sector proportion of total GVA (%)			
	2010	2015	2021
Burnley and Pendle	6.9%	7.9%	6.8%
Burnley	6.1%	7.3%	6.9%
Pendle	7.7%	9.5%	8.1%
Lancashire	7.2%	8.0%	6.8%
North West	5.8%	5.8%	4.9%
UK	5.8%	5.7%	5.1%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A6.3: Food and Agriculture sub-sector GVA, as % of total GVA, 2021					
	Burnley and Pendle	Burnley	Pendle	Lancashire	UK
Agriculture, forestry & fishing	0.4%	0.4%	0.6%	0.6%	0.7%
Food & beverage services	1.1%	1.5%	1.0%	1.5%	1.6%
Food, beverage & tobacco manufacturing	3.4%	2.5%	5.0%	2.9%	1.8%
Food retail	0.4%	0.6%	0.3%	0.4%	0.3%
Food wholesale	1.4%	2.0%	1.2%	1.4%	0.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Business Base

Table A6.4: Food and Agriculture sector businesses				
	2010	2015	2021	Change 2010 – 2021 (%)
Burnley and Pendle	685	755	770	12.4%
Burnley	295	320	335	13.6%
Pendle	390	435	435	11.5%
Lancashire LEP area	7,250	7,840	8,060	11.2%
North West	28,865	31,640	34,380	19.1%
UK	308,720	334,905	353,425	14.5%

Source: Business Count data, ONS

Table A6.5: Food and Agriculture sector businesses as proportion of total businesses (%)			
	2010	2015	2021
Burnley and Pendle	14.8%	14.6%	13.7%
Burnley	13.7%	13.1%	12.7%
Pendle	15.7%	15.9%	14.7%
Lancashire	15.9%	15.9%	14.9%
North West	14.1%	13.4%	12.7%
UK	14.7%	13.7%	12.8%

Source: Business Count data, ONS

Table A6.6: Food and Agriculture sector businesses by size, %				
	0-9	10-49	50-249	250+
Burnley and Pendle	91%	9%	0%	0%
Burnley	92.3%	7.7%	0.0%	0.0%
Pendle	90.8%	9.2%	0.0%	0.0%
Lancashire LEP area	86.4%	12.3%	1.1%	0.2%
Lancashire LEP area (all sectors)	88.3%	9.7%	1.7%	0.4%

Source: Business Count data, ONS

Employment

Table A6.7: Food and Agriculture sector employment				
	2010	2015	2021	Change 2010 – 2021 (%)
Burnley and Pendle	6,643	7,331	7,403	11.4%
Burnley	3,489	3,597	3,556	1.9%
Pendle	3,154	3,734	3,847	22.0%
Lancashire LEP area	66,596	69,830	69,980	5.1%
North West	306,460	328,685	327,749	6.9%
England	2,890,389	3,097,486	3,159,592	9.3%

Source: Business Register Employment Survey

Table A6.8 Food and Agriculture sector employment, % of total employment				
	2010	2015	2021	
Burnley and Pendle	9.1%	9.6%	9.0%	
Burnley	8.9%	8.7%	8.1%	
Pendle	9.3%	10.5%	9.9%	
Lancashire LEP area	9.6%	9.9%	9.6%	
North West	9.0%	9.2%	8.7%	
England	9.2%	9.2%	9.0%	

Source: Business Register Employment Survey

Table A6.9: Food and Agriculture sub-sector employment, as % of total, 2021								
	Burnley and Pendle		Burnley		Pendle		Lancashire	UK
	No.	%	No.	%	No.	%	%	%
Agriculture, forestry & fishing	619	0.7%	235	0.5%	384	1.0%	5.2%	5.8%
Food & beverage services	2,997	3.6%	1,666	3.8%	1,331	3.4%	2.2%	1.3%
Food, drink & tobacco manu.	2,158	2.6%	664	1.5%	1,494	3.8%	1.8%	1.4%
Food retail	807	1.0%	494	1.1%	313	0.8%	1.0%	0.9%
Food wholesale	821	1.0%	496	1.1%	325	0.8%	0.8%	5.0%

Source: Business Register Employment Survey

Productivity

Table A6.10: Food and Agriculture sector GVA per employment (£, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
Burnley and Pendle	£30,710	£36,492	£33,236	8.2%
Burnley	£26,749	£31,037	£29,983	12.1%
Pendle	£35,093	£41,747	£36,244	3.3%
Lancashire LEP	£28,691	£34,085	£29,456	2.7%
North West	£27,505	£27,972	£24,128	-12.3%
UK	£29,423	£30,038	£26,270	-10.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A6.11: Food and Agriculture sector GVA per employment as % of local GVA per employment			
	2010	2015	2021
Burnley and Pendle	75.8%	83.0%	75.9%
Burnley	68.6%	83.4%	85.5%
Pendle	83.0%	90.3%	81.5%
Lancashire LEP	75.1%	80.9%	70.4%
North West	64.1%	62.6%	56.2%
UK	63.6%	62.5%	56.6%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Appendix 7 – Lancaster and Morecambe Travel to Work Area

Key points

- The GVA of Food and Agriculture Lancaster and Morecambe sector was £129million in 2021. The GVA generated by the F&A industry in Lancaster and Morecambe was below all other TTWA comparator areas.
- The growth rate in Lancaster and Morecambe was considerable at 15.6% in comparison to other TTWA.
- The growth rate in the number of businesses in Lancaster and Morecambe’s TTWA was 9.0% for the period 2010-2021. This growth rate was below the Lancashire average and a number of other TTWA areas including Preston, Chorley and South Ribble, Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley, Burnley and Pendle and Blackpool, Fylde and Wyre.
- All Food and Agriculture businesses in Lancaster were classed as micro or small sized enterprises in 2021.
- Employment in the Food and Drink sector of Lancaster and Morecambe was below all other TTWAs at 5,695 in 2021. However, the growth in employment in the sector outpaced all other TTWAs at 18%.
- The growth in employment within the Food and Agriculture sector of Lancaster and Morecambe was more three the Lancashire average during the period 2010-2021.
- The productivity of the Food and Agriculture sector in Lancaster and Morecambe was £22,596 in 2021, below the comparative productivity of the sector in all other Lancashire TTWA.
- In contrast to a number of other TTWA, the productivity of the Food and Agriculture sector in Lancaster and Morecambe declined during the period 2010-2021.
- The productivity of Lancaster and Morecambe’s Food and Agriculture sector as % of local GVA per employment was 55% in 2021, below that of all Lancashire’s TTWAs.

Economic Output

Table A7.1: Food and Agriculture sector GVA (£m, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
Lancaster and Morecambe	111	143	129	15.6%
Lancashire LEP area	1,911	2,380	2,061	7.9%
North West	8,429	9,194	7,908	-6.2%
UK	85,043	93,041	83,004	-2.4%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A7.2: Food and Agriculture sector proportion of total GVA (%)			
	2010	2015	2021
Lancaster and Morecambe	4.8%	5.7%	4.9%
Lancashire	7.2%	8.0%	6.8%
North West	5.8%	5.8%	4.9%
UK	5.8%	5.7%	5.1%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A7.3: Food and Agriculture sub-sector GVA, as % of total GVA, 2021			
	Lancaster and Morecambe	Lancashire	UK
Agriculture, forestry & fishing	0.7%	0.6%	0.7%
Food & beverage services	1.8%	1.5%	1.6%
Food, beverage & tobacco manufacturing	1.1%	2.9%	1.8%
Food retail	0.4%	0.4%	0.3%
Food wholesale	0.9%	1.4%	0.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Business Base

Table A7.4: Food and Agriculture sector businesses				
	2010	2015	2021	Change 2010 – 2021 (%)
Lancaster and Morecambe	830	880	905	9.0%
Lancashire LEP area	7,250	7,840	8,060	11.2%
North West	28,865	31,640	34,380	19.1%
UK	308,720	334,905	353,425	14.5%

Source: Business Count data, ONS

Table A7.5: Food and Agriculture sector businesses as proportion of total businesses (%)			
	2010	2015	2021
Lancaster and Morecambe	20.1%	19.9%	19.4%
Lancashire	15.9%	15.9%	14.9%
North West	14.1%	13.4%	12.7%
UK	14.7%	13.7%	12.8%

Source: Business Count data, ONS

Table A7.6: Food and Agriculture sector businesses by size, %				
	0-9	10-49	50-249	250+
Lancaster and Morecambe	88%	12%	0%	0%
Lancashire LEP area	86.4%	12.3%	1.1%	0.2%
Lancashire LEP area (all sectors)	88.3%	9.7%	1.7%	0.4%

Source: Business Count data, ONS

Employment

Table A7.7: Food and Agriculture sector employment				
	2010	2015	2021	Change 2010 – 2021 (%)
Lancaster and Morecambe	4,829	5,299	5,695	18.0%
Lancashire LEP area	66,596	69,830	69,980	5.1%
North West	306,460	328,685	327,749	6.9%
UK	2,890,389	3,097,486	3,159,592	9.3%

Source: Business Register Employment Survey

Table A7.8: Food and Agriculture sector employment, % of total employment			
	2010	2015	2021
Lancaster and Morecambe	8.1%	8.7%	8.8%
Lancashire LEP area	9.6%	9.9%	9.6%
North West	9.0%	9.2%	8.7%
England	9.2%	9.2%	9.0%

Source: Business Register Employment Survey

Table A7.9: Food and Agriculture sub-sector employment, as % of total				
	Lancaster and Morecambe		Lancashire	UK
	No.	%	%	%
Agriculture, forestry & fishing	738	1.1%	5.2%	5.8%
Food & beverage services	3,552	5.5%	2.2%	1.3%
Food, drink & tobacco manu.	496	0.8%	1.8%	1.4%
Food retail	531	0.8%	1.0%	0.9%
Food wholesale	378	0.6%	0.8%	5.0%

Source: Business Register Employment Survey

Productivity

Table A7.10: Food and Agriculture sector GVA per employment (£, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
Lancaster and Morecambe	£23,057	£27,008	£22,596	-2.0%
Lancashire LEP	£28,691	£34,085	£29,456	2.7%
North West	£27,505	£27,972	£24,128	-12.3%
UK	£29,423	£30,038	£26,270	-10.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A7.11: Food and Agriculture sector GVA per employment as % of local GVA per employment			
	2010	2015	2021
Lancaster and Morecambe	58.9%	65.3%	55.5%
Lancashire LEP	75.1%	80.9%	70.4%
North West	64.1%	62.6%	56.2%
UK	63.6%	62.5%	56.6%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Appendix 8 – Preston, Chorley and South Ribble Travel to Work Area

Key points

- In 2021, GVA generated by the Food and Agriculture sector in Preston, Chorley and South Ribble TTWA was £521m.
- As a Travel to Work Area (TTWA), Preston, Chorley and South Ribble's Food and Agriculture sector generated the highest level of GVA of all Lancashire TTWA.
- Split into local authorities, South Ribble generated the second most GVA (£213m) of all local authorities after West Lancashire.
- The Food, beverage & tobacco manufacturing sub-sector is the largest F&A subsector in Preston, Chorley and South Ribble, with almost 5% of South Ribble total GVA generated by the subsector.
- The total number of Food and Agriculture sector businesses in the Preston, Chorley and South Ribble TTWA in 2021 was 1,705. The growth in the number of businesses in Preston, Chorley and South Ribble grew by 16.0% since 2011, outpacing all other TTWA areas except the West Lancashire and Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley TTWA.
- In 2021, as a proportion of total businesses, the Food and Agriculture sector represents 12% of total businesses in the Preston, Chorley and South Ribble TTWA.
- In comparison to other TTWA, the size of Food and Agriculture businesses in Preston, Chorley and South Ribble are larger than other TTWA in Lancashire.
- The F&A sector is a major employer in the Preston, Chorley and South Ribble TTWA. In 2021, employment in the P, C and SR TTWA stood at 16,862. In contrast to almost all TTWA areas, employment in the Preston, Chorley and South Ribble TTWA declined from 2010 to 2021, by 0.4%.
- Food and Agriculture sector employment as a proportion of total employment also declined, in contrast to all TTWA except Blackburn with Darwen, Hyndburn, Rossendale and Ribble Valley.
- The food & beverage services, food, drink & tobacco manufacturing and food wholesale sub sectors are the most significant, in terms of employment within the F&A sector in the Preston, Chorley and South Ribble and are larger than the overall Lancashire average.
- Productivity in Preston, Chorley and South Ribble TTWA grew by 13.6% during the period 2010-2021, outpacing all other TTWA areas.
- In 2021, the productivity of the Food and Agriculture sector in the Preston, Chorley and South Ribble TTWA stood at £30,907, above all comparator TTWA except Burnley and Pendle.

Economic Output

Table A8.1: Food and Agriculture sector GVA (£m, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
Preston, Chorley and South Ribble	461	577	521	13.1%
Preston	168	213	193	15.1%
Chorley	103	121	114	10.8%
South Ribble	189	243	213	12.6%
Lancashire LEP area	1,911	2,380	2,061	7.9%
North West	8,429	9,194	7,908	-6.2%
UK	85,043	93,041	83,004	-2.4%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A8.2: Food and Agriculture sector proportion of total GVA (%)			
	2010	2015	2021
Preston, Chorley and South Ribble	6.3%	7.1%	6.2%
Preston	4.8%	5.6%	4.9%
Chorley	6.2%	6.9%	6.5%
South Ribble	8.9%	9.3%	7.9%
Lancashire	7.2%	8.0%	6.8%
North West	5.8%	5.8%	4.9%
UK	5.8%	5.7%	5.1%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A8.3: Food and Agriculture sub-sector GVA, as % of total GVA, 2021						
	Preston, Chorley and South Ribble	Preston	Chorley	South Ribble	Lancashire	UK
Agriculture, forestry & fishing	0.5%	0.4%	0.7%	0.4%	0.6%	0.7%
Food & beverage services	1.3%	1.2%	1.8%	1.1%	1.5%	1.6%
Food, beverage & tobacco manufacturing	2.5%	1.1%	2.2%	4.7%	2.9%	1.8%
Food retail	0.3%	0.3%	0.4%	0.3%	0.4%	0.3%
Food wholesale	1.6%	1.9%	1.4%	1.5%	1.4%	0.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Business Base

Table A8.4: Food and Agriculture sector businesses				
	2010	2015	2021	Change 2010 – 2021 (%)
Preston, Chorley and South Ribble	1,470	1,640	1,705	16.0%
Preston	540	615	650	20.4%
Chorley	485	550	590	21.6%
South Ribble	445	475	465	4.5%
Lancashire LEP area	7,250	7,840	8,060	11.2%
North West	28,865	31,640	34,380	19.1%
UK	308,720	334,905	353,425	14.5%

Source: Business Count data, ONS

Table A8.5: Food and Agriculture sector businesses as proportion of total businesses (%)			
	2010	2015	2021
Preston, Chorley and South Ribble	12.5%	13.0%	12.0%
Preston	12.1%	12.6%	11.6%
Chorley	13.1%	13.4%	12.7%
South Ribble	12.6%	12.8%	11.6%
Lancashire	15.9%	15.9%	14.9%
North West	14.1%	13.4%	12.7%
UK	14.7%	13.7%	12.8%

Source: Business Count data, ONS

Table A8.6: Food and Agriculture sector businesses by size, %				
	0-9	10-49	50-249	250+
Preston, Chorley and South Ribble	85%	15%	1%	0%
Preston	91.6%	16.8%	1.7%	0.0%
Chorley	84.0%	14.3%	0.0%	0.0%
South Ribble	67.2%	10.9%	0.0%	0.0%
Lancashire LEP area	86.4%	12.3%	1.1%	0.2%
Lancashire LEP area (all sectors)	88.3%	9.7%	1.7%	0.4%

Source: Business Count data, ONS

Employment

Table A8.7: Food and Agriculture sector employment				
	2010	2015	2021	Change 2010 – 2021 (%)
Preston, Chorley and South Ribble	16,933	17,176	16,862	-0.4%
Preston	7,175	6,949	6,746	-6.0%
Chorley	4,206	4,392	4,294	2.1%
South Ribble	5,552	5,835	5,822	4.9%
Lancashire LEP area	66,596	69,830	69,980	5.1%
North West	306,460	328,685	327,749	6.9%
UK	2,890,389	3,097,486	3,159,592	9.3%

Source: Business Register Employment Survey

Table A8.8: Food and Agriculture sector employment, % of total employment			
	2010	2015	2021
Preston, Chorley and South Ribble	8.6%	8.6%	8.3%
Preston	7.6%	7.5%	6.9%
Chorley	8.6%	9.3%	9.4%
South Ribble	10.4%	9.9%	9.6%
Lancashire LEP area	9.6%	9.9%	9.6%
North West	9.0%	9.2%	8.7%
UK	9.2%	9.2%	9.0%

Source: Business Register Employment Survey

Table A8.9: Food and Agriculture sub-sector employment, as % of total, 2021										
	Preston, Chorley and South Ribble		Preston		Chorley		South Ribble		Lancashire	UK
	No.	%	No.	%	No.	%	No.	%	%	%
Agriculture, forestry & fishing	1,522	0.7%	599	0.6%	503	1.1%	420	0.7%	5.2%	5.8%
Food & beverage services	7,994	3.9%	3,474	3.6%	2,352	5.2%	2,169	3.6%	2.2%	1.3%
Food, drink & tobacco manu.	3,671	1.8%	778	0.8%	679	1.5%	2,214	3.7%	1.8%	1.4%
Food retail	1,471	0.7%	711	0.7%	375	0.8%	385	0.6%	1.0%	0.9%
Food wholesale	2,204	1.1%	1,184	1.2%	386	0.8%	634	1.0%	0.8%	5.0%

Source: Business Register Employment Survey

Productivity

Table A8.10: Food and Agriculture sector GVA per employment (£, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
Preston, Chorley and South Ribble	£27,211	£33,593	£30,907	13.6%
Preston	£23,414	£30,649	£28,662	22.4%
Chorley	£24,574	£27,498	£26,656	8.5%
South Ribble	£34,114	£41,689	£36,643	7.4%
Lancashire LEP	£28,691	£34,085	£29,456	2.7%
North West	£27,505	£27,972	£24,128	-12.3%
UK	£29,423	£30,038	£26,270	-10.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A8.11: Food and Agriculture sector GVA per employment as % of local GVA per employment			
	2010	2015	2021
Preston, Chorley and South Ribble	73.2%	82.0%	75.0%
Preston	62.9%	75.5%	70.8%
Chorley	72.0%	74.2%	69.2%
South Ribble	85.5%	93.5%	82.6%
Lancashire LEP	75.1%	80.9%	70.4%
North West	64.1%	62.6%	56.2%
UK	63.6%	62.5%	56.6%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Appendix 9 – West Lancashire Travel to Work Area

Key points

- In comparison to the other TTWA in Lancashire, the businesses in the F&A sector of West Lancashire are larger in size with 2.7% of business considered to be medium sized (Employing 50-249 workers).
- The economic output of the F&A sector of West Lancashire grew by 15.7% from 2010-2021, above all comparator TTWA areas.
- As a proportion of total GVA, the GVA generated by the Food and Agriculture sector in West Lancashire increased by 13% from 2010 to 2021. This growth outpaced all other TTWAs.
- The number of businesses in West Lancashire’s Food and Agriculture sector declined by 5.6% to 760 in 2021. The decline in businesses was in contrast to growth across other TTWAs.
- The proportion of total businesses that are in the F&A sector in West Lancashire is 17.1%, above all TTWAs.
- On average, F&A businesses in West Lancashire are larger than the other TTWAs, with 2.7% businesses medium sized (50-249 employers).
- Employment in West Lancashire’s Food and Agriculture sector as a percentage of total employment was 16.6%, above all of Lancashire’s TTWAs.
- The productivity of the Food and Agriculture sector in West Lancashire was 78% of the overall average, the highest value of all TTWAs in Lancashire.
- The Food and Beverage services sub-sector of the F&A sector in West Lancashire accounted for 7.3% of total employment in West Lancashire, a higher proportion than all other Lancashire TTWA.

Economic Output

Table A9.1: Food and Agriculture sector GVA (£m, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
West Lancashire	240	304	278	15.7%
Lancashire LEP area	1,911	2,380	2,061	7.9%
North West	8,429	9,194	7,908	-6.2%
UK	85,043	93,041	83,004	-2.4%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A9.2: Food and Agriculture sector proportion of total GVA (%)			
	2010	2015	2021
West Lancashire	12.3%	14.5%	13.0%
Lancashire	7.2%	8.0%	6.8%
North West	5.8%	5.8%	4.9%
UK	5.8%	5.7%	5.1%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A9.3: Food and Agriculture sub-sector GVA, as % of total GVA, 2021			
	West Lancashire	Lancashire	UK
Agriculture, forestry & fishing	2.2%	0.6%	0.7%
Food & beverage services	2.5%	1.5%	1.6%
Food, beverage & tobacco manufacturing	6.1%	2.9%	1.8%
Food retail	0.3%	0.4%	0.3%
Food wholesale	1.9%	1.4%	0.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Business Base

Table A9.4: Food and Agriculture sector businesses				
	2010	2015	2021	Change 2010 – 2021 (%)
West Lancashire	805	815	760	-5.6%
Lancashire LEP area	7,250	7,840	8,060	11.2%
North West	28,865	31,640	34,380	19.1%
UK	308,720	334,905	353,425	14.5%

Source: Business Count data, ONS

Table A9.5: Food and Agriculture sector businesses as proportion of total businesses (%)			
	2010	2015	2021
West Lancashire	20.6%	19.2%	17.1%
Lancashire	15.9%	15.9%	14.9%
North West	14.1%	13.4%	12.7%
UK	14.7%	13.7%	12.8%

Source: Business Count data, ONS

Table A9.6: Food and Agriculture sector businesses by size, %				
	0-9	10-49	50-249	250+
West Lancashire	80.7%	16.7%	2.7%	0.0%
Lancashire LEP area (F&A sector)	86.4%	12.3%	1.1%	0.2%
Lancashire LEP area (all sectors)	88.3%	9.7%	1.7%	0.4%

Source: Business Count data, ONS

Employment

Table A9.7: Food and Agriculture sector employment				
	2010	2015	2021	Change 2010 – 2021 (%)
West Lancashire	8,253	8,348	9,104	10.3%
Lancashire LEP area	66,596	69,830	69,980	5.1%
North West	306,460	328,685	327,749	6.9%
England	2,890,389	3,097,486	3,159,592	9.3%

Source: Business Register Employment Survey

Table A9.8: Food and Agriculture sector employment, % of total employment			
	2010	2015	2021
West Lancashire	15.7%	16.3%	16.6%
Lancashire LEP area	9.6%	9.9%	9.6%
North West	9.0%	9.2%	8.7%
England	9.2%	9.2%	9.0%

Source: Business Register Employment Survey

Table A9.9: Food and Agriculture sub-sector employment, as % of total				
	West Lancashire		Lancashire	UK
	No.	%	%	%
Agriculture, forestry & fishing	1,809	3.3%	5.2%	5.8%
Food & beverage services	3,998	7.3%	2.2%	1.3%
Food, beverage & tobacco manufacturing	2,285	4.2%	1.8%	1.4%
Food retail	369	0.7%	1.0%	0.9%
Food wholesale	644	1.2%	0.8%	5.0%

Source: Business Register Employment Survey

Productivity

Table A9.10: Food and Agriculture sector GVA per employment (£, 2018 prices)				
	2010	2015	2021	Change 2010 – 2021 (%)
West Lancashire	£29,092	£36,451	£30,520	4.9%
Lancashire LEP	£28,691	£34,085	£29,456	2.7%
North West	£27,505	£27,972	£24,128	-12.3%
UK	£29,423	£30,038	£26,270	-10.7%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections

Table A9.11: Food and Agriculture sector GVA per employment as % of local GVA per employment			
	2010	2015	2021
West Lancashire	78.5%	89.0%	78.0%
Lancashire LEP	75.1%	80.9%	70.4%
North West	64.1%	62.6%	56.2%
UK	63.6%	62.5%	56.6%

Source: Cambridge Econometrics Local Authority Economic Forecasting Model (LEFM) Projections