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Industrial Specialisms in the Doncaster economy

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Economic research, data and analysis

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I. Executive Summary

I.1 Aims and approach

As part of the process of developing an inclusive Growth plan, Doncaster Council commissioned Ortus Economic Research along with University of Sheffield to conduct a review of industrial specialisms within the Doncaster economy.

The aims of the study are to:

- A. To identify the industrial specialisms within the Doncaster economy.
- B. To set out how the development of and growth within these specialisms might impact on the Doncaster economy in the future, based on scenario development and forecasting.
- C. To advise Doncaster Council on how to integrate the industrial specialisms game-changer into the wider IGS.

The study was delivered through a methodology based on desk research, data capture and analysis and consultation with key economic stakeholders from across the Doncaster economy.

I.2 Key findings

Existing evidence identifies the following characteristics of the Doncaster economy:

- The economy is able to count on excellent accessibility, transport and infrastructure links (rail, road and air).
- People living and working in Doncaster are able to enjoy an attractive natural environment.
- The key tradeable sectors that are prominent in the local economy are Logistics, Manufacturing, Engineering and Construction. Key 'everyday' (or local) sectors include Health & Care, Education and Retail.
- Prior cluster analysis identifies the following tradeable clusters: Logistics & E-commerce, Civil engineering, Construction Products & Services, Plastics & Vulcanised Products and Production technology. It also identifies the following local clusters: Health & Care, Education & Childcare, Building Services, Food & Beverage and Government.
- Previous assessments of specialisms have been limited by approaches which adopt a vertical perspective of the economy and therefore overlook cross-cutting strengths.
- In order to address this limitation and to identify specialisms which are more likely to deliver inclusive growth impacts, this study has adopted a more horizontal perspective. Adopting such an approach leads to the identification of Platforms for growth.
- As well as focusing on specialisms, it is also crucial that the Council and partners establish and develop the correct framework conditions for growth. The evidence is that the following are the most critical framework conditions for consideration when developing a specialisms-led strategy:
 - Supporting the local economy to create a larger number of high value jobs is seen as crucial to address local economic weaknesses and to drive inclusive growth that benefits all.
 - Stimulating greater critical mass in the town centre in order to ensure viability and vibrancy (to support the retail, leisure, cultural and arts sectors, for example).
 - Ensuring that wider economic development, growth and strategic opportunities are tapped into. This includes, for example, initiatives around the Five Foundations and four Grand Challenges of the Industrial Strategy, city-region strategies and plans, supply chain

development, maximising the opportunities arising from economic growth in neighbouring areas, and so on.

- Building a stronger service economy in Doncaster is crucial not only because of the direct benefits it brings (jobs and income for a wide range of jobs and skills levels) but also because it supports broader economic activity. This may be through services supplied to businesses in other sectors, such as logistics, engineering or manufacturing, or through creating local demand by virtue of the jobs it creates and salaries/profits it distributes. Improving the offer around office accommodation is seen as crucial to this.
- The digital and creative economy is increasingly seen as an essential part of a modern, growing economy. The proposed development by 360 Media at High Melton should be seen as a once-in-a-generation opportunity to kick-start this sector in the local economy. The spin-off benefits for the local area are very significant and exciting.
- The Council and partners need a long-term plan that will traverse political cycles, that delivers a sustainable vision and action plan and is backed up by a process that drives it forward. This must also articulate local ambition and drive to raise expectations of all in Doncaster and to make it happen.
- Building an educational offer which serves current needs but also fit for the future (i.e. a more highly skilled economy)
- Recognising that individual specialisms are themselves not mutually exclusive. This means that the plan must consider how to maximise mutually supportive opportunities which impact the widest possible section of the economy and society (e.g. through supply chain development, the creation of assets that are relevant to multiple specialisms within the economy, developing talent with transferable skills, and so on).
- Taking the specialisms approach is a key part of a strategy to achieve the most aspirational future growth scenario for Doncaster's economy.
- Each of the Platforms (i.e. specialisms) represent cross-sectional strengths in the local economy identified through consideration of the related activities, niche products/services, skills, techniques, tools and business models that the Doncaster economy is founded on.
- As a result, this study has identified four Platforms for growth which represent specialisms within and across the Doncaster economy. These are:
 - Established Platform - Engineering & Technology
 - Established Platform - Future Mobility (including Rail)
 - Opportunity Platform - Advanced Materials
 - Opportunity Platform - Creative & Digital
- In addition, the study proposes that a fifth Platform be included within any inclusive growth strategy going forward, based on its fundamental importance to a modern, growing economy; Supporting Services.

1.3 Future impact

The established target for jobs growth in Doncaster is 1% per annum, which follows the target set by Sheffield City Region in its most recent Strategic Economic Plan. Achieving this target would create an additional 13,000 jobs over the plan period 2015-2032. Capitalising on opportunities presented by the Platforms will be key to achieving this level of growth.

The five Platforms identified in this study represent the key specialisms on which future growth can be built. This should not be to the exclusion of any aspect of the economy; rather, the inclusive growth

strategy must build on these Platforms whilst also putting in place appropriate initiatives and mechanisms by which growing businesses and sectors across the economy can be supported.

To demonstrate the important impact that growth in these Platforms has the potential to generate, three future scenarios have been examined. These align with the forecasts presented by Peter Brett Associates in their study of future housing needs. The potential impacts are significant by 2032 based on the most aspirational scenario (i.e. 'jobs-led'), as follows:

- Engineering & Technology: an additional 3,800 jobs and £400m in GVA with a productivity increase of 28%.
- Future Mobility: an additional 6,400 jobs and £440m in GVA with a productivity increase of 22%.
- Advanced Materials: an additional 200 jobs and £80m in GVA with a productivity increase of 31%.
- Creative & Digital: An additional 1,300 jobs (including High Melton) and £140m in GVA with a productivity increase of 20%. High Melton alone is estimated to be capable of delivering an additional 1,000 jobs into this sector.

It is important to recognise that the definitions of the platforms are not mutually exclusive, leading to a degree of double-counting within the figures above. If double-counting is excluded, the net impact of growth across the four specialisms (and based on the most ambitious, jobs-led scenario), could be:

- An increase in employment from around 22,300 in 2016 to 31,400 in 2032 (an increase 9,100 jobs, or 41%)
- An increase in GVA from around £1.08bn in 2016 to £1.88bn in 2032 (an increase of £0.8bn or 74%)
- An increase in average GVA per head from around £48,400 in 2016 to £59,800 in 2032 (an increase of £11,400 or 23%)

If double-counting is excluded from the analysis of Supporting Services and also based on the most ambitious scenario, the net effect could be:

- An increase in employment from around 12,500 in 2016 to 14,900 in 2032 (an increase of 3,400 jobs, or 19%)
- An increase in GVA from around £0.4bn in 2016 to £0.8bn in 2032 (an increase of £0.4bn, or 79%)
- An increase in average GVA per head from around £34,800 in 2016 to £52,000 in 2032 (an increase of £17,200, or 50%)

The aspirational (jobs-led) scenario for Doncaster presents significantly better outcomes compared to the baseline (or 'business as usual') scenario, and is therefore to be considered the optimum outcome to aim for. Achieving the outcomes described in the aspirational (jobs-led) scenario would lead to an additional 26,600 jobs created between 2015 and 2032 (1,560 per annum), almost double the number created in the baseline scenario (13,800 in total, or 800 jobs per annum).

The analysis presented here has taken a relatively prudent approach to expressing what might be achieved in the future through the growth of these Platforms. For example, it would be anticipated that future growth across the specialisms would create additional agglomeration and supply chain effects, catalysing additional growth across the economy. This study has not attempted to estimate or include such catalytic effects but they should be considered as part of the potential benefit available to the Doncaster economy through growth in the Platforms. Such effects could add further to the growth that could be achieved through an approach focused on Platforms.

This study has demonstrated that adopting a dedicated approach to growth within specialisms is a key part of the strategy to achieve the most ambitious outcome for Doncaster, its economy and people. By

focusing on specialisms and realising the opportunity at High Melton Studios offers the Council and partners the best chance of achieving the most ambitious growth ambitions.

1.4 Recommendations

In order to build on the Platforms and integrate them effectively into the Inclusive Growth plan, the study makes nine recommendations as follows:

1. **Understanding and evaluating inclusive growth.** Maintain an in-depth understanding of changing socio-economic dynamics and ensure that the nature and impact of inclusive growth interventions are documented to evidence change occurring in Doncaster.
2. **Leading not Owning Inclusive Growth:** A critical role of DMBC is convening the inclusive growth agenda and co-creating the conditions for inclusive growth not delivering it, whilst working with and within the framework conditions of the national government and the Local Enterprise Partnership as well as with other public and private civic stakeholders.
3. **Internal Coordination and Road Mapping:** Create a clear consensus and sense of shared outcomes with overall accountability for the delivery of the DGT programme of work, as well as domain specific accountability i.e. learning, working, living and caring.
4. **Making Inclusive Growth Distinctive:** Proactively manage the activities and programmes delivered under the learning, working, living and caring domains, both individually and collectively, that advance the 3Ps in a way that is distinctive to Doncaster.
5. **Distinguishing Prioritises and Trade-Offs:** Make decisions about priorities and choices about trade-offs in the context of budgetary and capacity constraints of DMBC, and the wider DGT team, in striving for inclusive growth.
6. **A People Centric Approach:** Ensure that they are actively engaged with and through different community groups to foster the cultural change necessary across Doncaster, its businesses and people, to ultimately deliver inclusive growth.
7. **Developing Critical Mass:** The intention of the proposed platforms is to support specialisation through related variety, but this will only occur if industries are supported to work in this way.
8. **Inclusive Focus of Inclusive Growth:** Ensure that all sections of society and businesses can participate and have the opportunity to become more prosperous.
9. **Working on the supply-side and demand-side:** Maintain an effective combination of both supply-side and demand-side measures with the sustained commitment of DMBC and partners.

2. Background and project aims

Recent years have seen a growing interest in the concept of inclusive growth, where economic growth benefits all people in society. It is an alluring concept, where a more prosperous economy combines with a more equitable society to distribute the benefits of growth more evenly.

Driven by the vision of the new Mayor of Doncaster, Ros Jones, Doncaster Council has recently published an Inclusive Growth Strategy (IGS). The IGS will become a major asset in delivering the vision set out by the Doncaster Growing Together (DGT) team, which is:

*“For Doncaster people, places and businesses to **participate** in a growing and **productive** economy and enjoy improved **prosperity**”*

There are two key components to the IGS:

1. Game-changers – a number of game-changing projects which combine existing DGT activities, new ideas and fresh analysis of our strengths, challenges and opportunities. The game-changers are; Quality of Place, **Industry Specialisms**, Education & Skills, Better Work & Jobs, Social Value & Community Wealth Building, Reaching Vulnerable People & Places.
2. Strengthening foundations – supporting and developing the fundamental building blocks of a prosperous and inclusive economy and society. The foundations are business support, infrastructure, inclusive labour markets, education & skills, major projects, new housing, health & well-being, arts & culture, town centre, environmental protection, community resilience and innovation.

This project supports the development of one of the game-changers projects – growing industry specialisms.

2.1 Aim of this study

In order to support the Council and partners’ efforts to design and implement the IGS, Ortus Economic Research and Professor Tim Vorley of the University of Sheffield were commissioned to deliver a study with the following overarching aim:

“to understand the specialisms that will drive growth in the Doncaster and to make recommendations as to how Doncaster Council might develop an inclusive strategy to exploit these specialisms for the benefit of all.”

Flowing from this aim are the following key objectives:

- A. To identify the industrial specialisms within the Doncaster economy.
- B. To set out how the development of and growth within these specialisms might impact on the Doncaster economy in the future, based on scenario development and forecasting.
- C. To advise Doncaster Council on how to integrate the industrial specialisms game-changer into the wider IGS.

2.2 Approach

The approach to delivering this study is founded on three key tasks:

1. Recognising that prior work has been undertaken, the study has required a programme of **desk research** to review and assimilate existing relevant strategies, plans, data and evidence.
2. **Additional data analysis** regarding the nature of the business base within key sectors has been delivered, to further identify the specialisms within those sectors and the key players within those specialisms. The specialisms, once identified, have also been analysed in the context of future

projections for the Doncaster economy, in order to highlight the possible economic growth that could be delivered by the specialisms and also more widely across the economy.

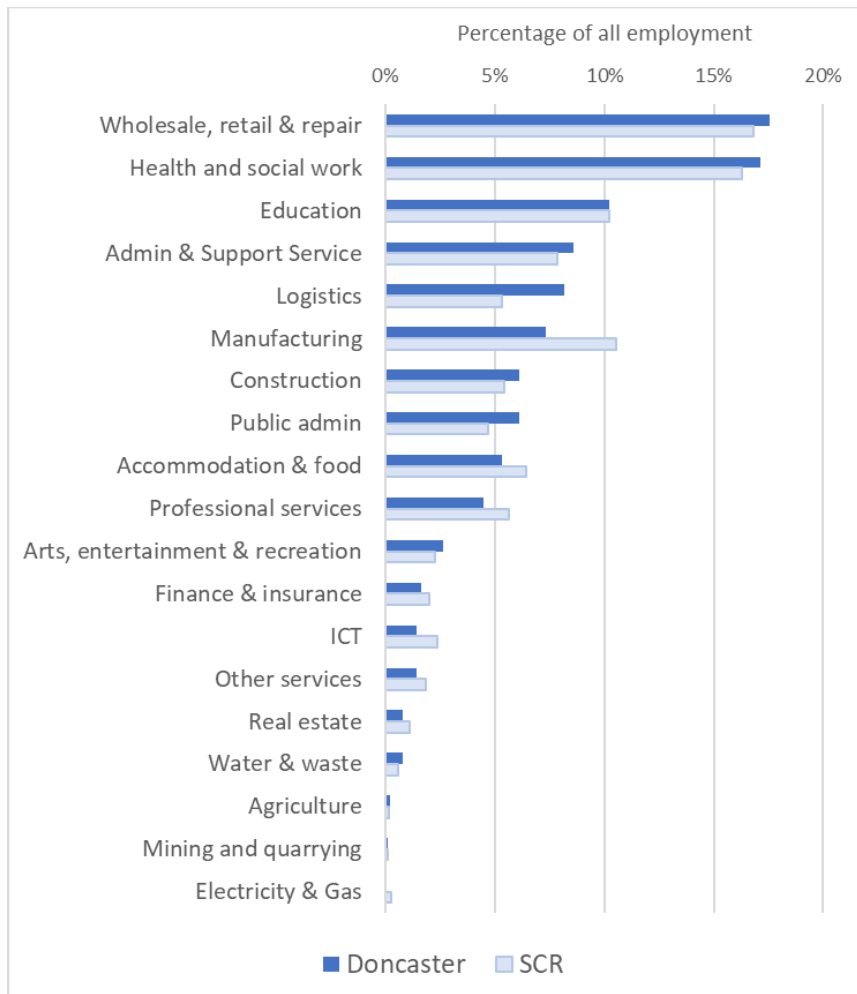
3. A programme of **consultation** will be delivered involving the Council, private sector businesses and other key public and private stakeholders to investigate specialisms and supply chains, understand the opportunities within key markets for those specialisms and formulate and test recommendations.

3. Doncaster's economy today

The vision for Doncaster's economy is of one that is resilient, entrepreneurial and capable. Whilst there are numerous strengths on which to build and opportunities to seize, there are risks and weaknesses which also need to be addressed. This chapter presents review of the Doncaster economy today which sets the context for the analysis of specialisms presented thereafter.

3.1 Summary of industrial mix

Figure I: Employment by sector (%) – Doncaster and Sheffield City Region



Whilst Doncaster has a number of sectors which growth potential, the economy is relatively reliant on lower skilled sectors that are more sensitive to changes in consumer demand and more reliant on local demand (e.g. retail, wholesale, and construction). Building an economy with a sectoral mix that contains a higher proportion of high value activities and jobs is key to building prosperity.

Doncaster is strong in the following tradeable sectors – those where goods and services are or may be traded internationally¹:

- Transport and storage (11,500 jobs)
- Manufacturing including advanced engineering (10,500 jobs)

¹ Doncaster Council (2013), Doncaster Economic Growth Plan 2013-2018.

See <http://www.doncaster.gov.uk/services/business-investment/doncaster-s-economic-strategy>

- Financial & Professional services (8,800 jobs)
- Construction including civil engineering (7,500 jobs)
- Wholesale (4,500 jobs)

It is also strong in a number of sectors with the 'everyday' (or foundational) economy. These serve a more localised market:

- Health and social care (20,500 jobs)
- Education (11,000 jobs)
- Retail (12,000 jobs)
- Business administration (10,000 jobs)
- Public administration (6,500 jobs)

Compared to Sheffield City Region, Doncaster's economy is more reliant on wholesale/retail, health & social work, Logistics, Construction and Public administration. It is less reliant on Manufacturing, Accommodation/food, Professional services, Finance & insurance, ICT and Real estate. A key economic trend of the UK economy over recent decades has been the transition from a manufacturing-led to a service-led economy.

The evidence shows that the Doncaster economy has a smaller knowledge economy (which relates to jobs and activities that rely on the exploitation of information, knowledge or intellectual capital and includes both manufacturing and services) than in comparable areas, accounting for 13% of employment compared to 19% in Yorkshire and Humber and 22% across the UK. Also of concern is that employment in these activities has experienced a decline of 9% between 2007 and 2016, bucking the national trend (1% growth). Finally, Doncaster's service economy is smaller and not as diverse as found in other comparable areas. Similarly, at present the creative and digital economy is comparatively small in Doncaster. The research undertaken for this study indicates that a lack of suitable office accommodation in and around Doncaster is proving to be a constraint on the City's ability to attract and retain businesses in the service economy.

3.1.1 Other characteristics

3.1.1.1 Business stock

Doncaster's business stock has grown significantly in the last decade but density remains below the national average, indicating a lack of critical mass in the economy. Evidence suggests that start-up rates are high but this is coupled with a low business survival rate, meaning there is a high level of churn. The economy is also weighted towards micro-enterprises, with only 2.2%² of businesses employing more than 50 people.

3.1.1.2 Employment

The jobs base in Doncaster is relatively strong, with a high number of workers and high employment density compared to other local economies. Doncaster contributes 0.42% of all GB's employment³. Despite sustained growth in employment post-recession, employment levels have dipped more recently. The most recent figures indicate that between 2015 and 2016, Doncaster experienced a decline in employment of almost 1%. Self-employment rates are also low by national standards.

² Doncaster District Profile - An Economic, Social and Environmental Summary Profile of Doncaster, Grant Thornton, 2018

³ Grant Thornton, *op cit*

3.1.1.3 *Economic output and productivity*

Doncaster makes an important contribution to the national economy in terms of economic output (0.32% of GB's GVA⁴) and employment. Doncaster has the second highest levels of GVA in South Yorkshire after Sheffield and over the past decade, Doncaster has added £705m to its annual GVA figure to have current levels of £5.2bn. This equates to latest figures of £16,897 per local resident and (approximately) £39,980 per local job. GVA growth has been lower than seen across the country, however. Levels of GVA per capita and per job (productivity) are relatively low and have been falling behind UK levels in relative terms.

GVA growth overall, & since 2007, has been driven by the performance of a range of sectors, particularly including Distribution & Transport, together with Accommodation & Food, and also the Public sector. There has also been growth in output from Manufacturing, as well as – promisingly – Professional & Business services and Real Estate. Sectors that have performed relatively less well have been Financial services, Construction and ICT.

3.1.1.4 *Skills and education*

Doncaster's economy can be typified as comparatively low skill and low wage. This means that Doncaster is struggles to attract and develop high value jobs and investment that will create them. Doncaster's is an ageing economy meaning that there will be pressure through 'replacement demand' in coming years and migration trends show 24-49 year olds are beginning to relocate elsewhere to develop their careers. Doncaster has a high proportion of people in part-time work, and those that do not work at all. Too many people are out of work, with over 20,000 claiming some form of out-of-work benefit. Youth unemployment rates are falling but are still above the regional average. With a net outflow of around 6,000 commuters it is clear there are an insufficient number of jobs for our population, despite the scale of our economy.

3.2 A more detailed examination of industries

The question of what industries are strongest in Doncaster is by no means a new one. Standard economic analysis and assessment of any local economy cover such data, as do exercises such as Employment Land Studies. Indeed, Doncaster's Economic Growth Plan⁵ sets out some data related to the size and scale of key sectors, as cited above.

Doncaster's economy is heavily reliant on the public sector for jobs, with one third of all jobs being provided by the related sectors (health & social care, education, public admin providing 38,000 jobs or 30% of all jobs). Of course, it is important to acknowledge the critical importance of these sectors in providing a large number of jobs, whilst at the same time acknowledging the associated risks and challenges. For example, public sector jobs are driven by budgetary decisions made elsewhere (London, largely) and the long period of austerity that the UK has experienced has significantly impacted the number of jobs in such sectors. Such jobs are often reasonably well paid (in fact, public sector jobs are on average better paid than private sector jobs⁶) but there are few high-value, highly paid jobs and related activities do not contribute to the entrepreneurial economy; they do not lead to growth directly nor do they contribute to the development of new economic activities that may drive growth in the future.

⁴ Grant Thornton, *op cit*

⁵ Doncaster Council (2013), Doncaster Economic Growth Plan 2013-2018. See <http://www.doncaster.gov.uk/services/business-investment/doncaster-s-economic-strategy>

⁶ ONS, Average weekly earnings by sector. See <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/averageweeklyearningsbysectorearn02>

Also of note is that other sectors that provide large numbers of jobs are relatively low value in terms of the range of occupations provided, productivity and wages. For example, whilst average weekly earnings in the both the Wholesale and Logistics sectors across the UK were £581 in May 2018⁷, this compared to £358 in Retail. And whilst the earnings in Wholesale and Logistics are higher than the average for the whole economy, they are well below other sectors such as ICT (£817), Finance & Insurance (£1,103) and Professional services (£684). So the industrial mix in Doncaster is a contributory factor to the conclusion that it is (generally speaking) a low-skill, low wage economy.

The industrial mix will drive other features and characteristics of the Doncaster economy also. For example, analysis undertaken by West Yorkshire Combined Authority using the Regional Economic Model indicates that:

- Doncaster has the second highest levels of GVA in South Yorkshire after Sheffield. Over the past decade, Doncaster has added £705m to its annual GVA figure to achieve current levels of £5.2bn. This equates to £16,897 GVA per local resident and approximately £39,980 GVA per local job.
- GVA growth since 2007 in Doncaster, along with the rest of South Yorkshire & Yorkshire & Humberside overall, has been relatively low when compared within the UK and internationally. As a result, levels of GVA per capita and per job (productivity) are relatively low and have been falling behind UK levels in relative terms.
- GVA growth has been driven by the performance of a range of sectors, particularly Logistic, Accommodation & Food and the Public sector. Comparatively speaking, these sectors are of lower economic value and therefore GVA growth is suppressed by the dominance of such sectors.
- On a more positive note, however, there is also evidence of growth in GVA output from Manufacturing, Professional & Business services and Real Estate.
- Lastly, in terms of GVA growth, sectors that have performed relatively less well have been Financial services, Construction and ICT, indicating that whilst Doncaster's economy contains some of these higher value activities, the performance has been lower than in comparable areas which is also contributing to an increasing divergence from national GVA and productivity levels.

3.3 Economic clusters

The evidence reviewed above is collected and assessed at a very low level of sector resolution. It only goes as far as examining industries and, whilst this provides a useful level of detail to support summary conclusions about the economy overall, it does not support an understanding of specialisms.

There are important analysis steps that need to be taken to creating this understanding. The first is to examine the economy at a much greater level of sectoral detail. The second is to consider the which activities are not only significant in terms of overall employment levels but also in terms of their concentration in Doncaster relative to other locations (and the UK economy as a whole). Third, and this is where this study advances thinking about specialisms, is to review the economy from a more horizontal perspective to identify related strengths.

Doncaster council has in the last commissioned analysis to identify and assess sectoral strengths and economic clusters. In such analysis, the goal is to identify agglomerations (i.e. spatial concentrations) of related economic activity (i.e. clusters) that represent full or partial supply chains for particular markets. These clusters combine primary production, processing, distribution and service activities that describe

⁷ ONS, Average weekly earnings by industry. See

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/averageweeklyearningsbyindustryearn03/current>

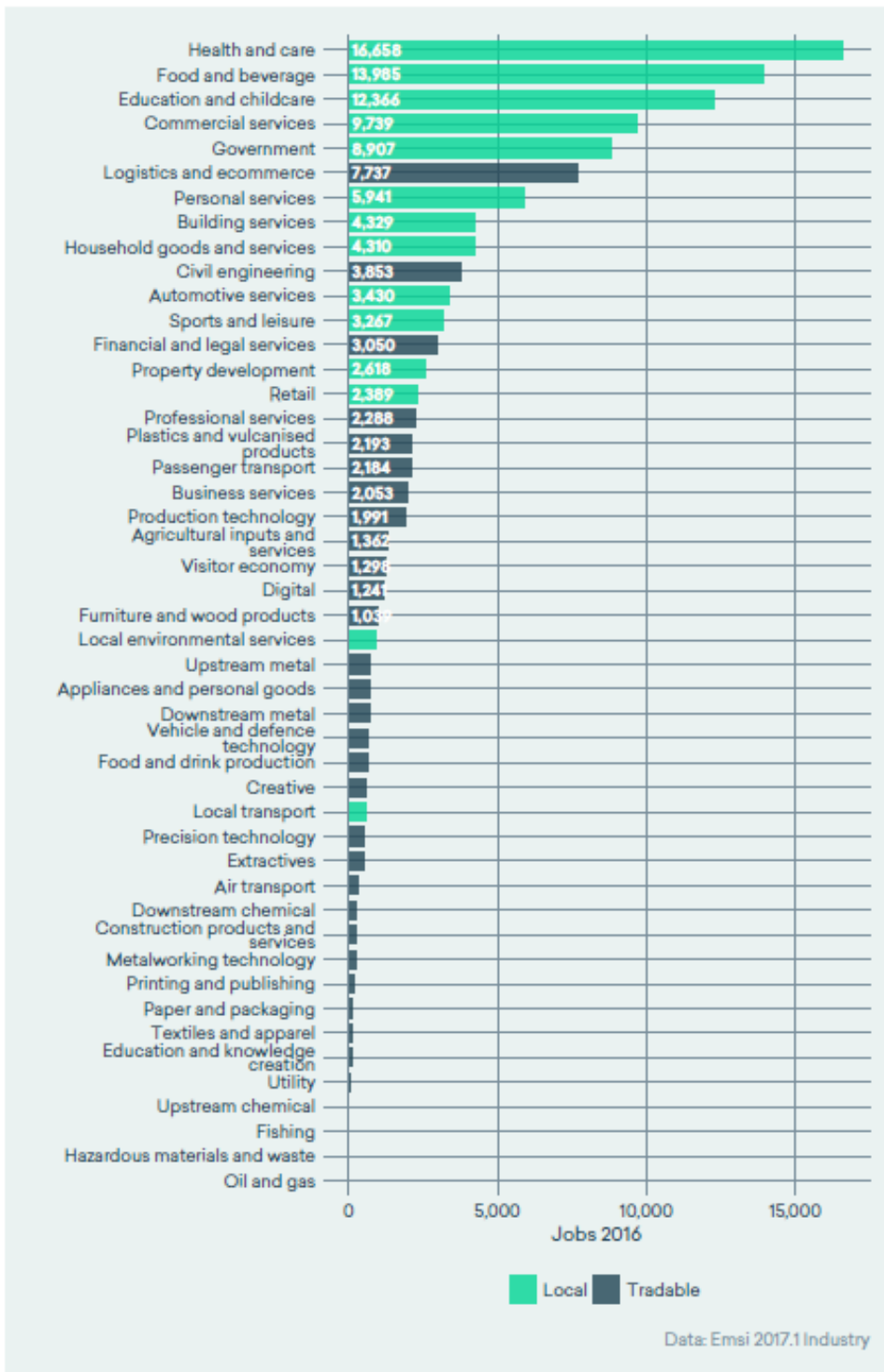
the process from supply to demand. For example, the financial services cluster in the City of London is made up of not only the core financial services industries (banking, investment, trading etc) but also a range of supporting products and services (e.g. printing, legal services, regulatory and governance systems, software, consultancy and so on) that generate and sustain competitive advantage for those activities in that place. Co-location of related activities is also a feature, because close proximity supports competition and collaboration, the sharing of labour markets, ease of access which reduces certain costs and so on.

An analysis of cluster undertaken on behalf of Doncaster Council⁸ identified a number of cluster strengths in the local economy, based on an analysis of location quotients (LQs). An LQ is a useful tool in understanding the concentration of employment in specific economic activities (sectors) as it compares the proportion of local employment in an activity with the national equivalent. Any resulting LQ greater than 1 indicates that the activity is more concentrated in that location than would be expected based on a comparison with the national economy. In this way, economic specialisms (i.e. the activities which are most concentrated in a particular local economy) can be identified.

Clusters are split into those that are 'tradeable' (i.e. have the propensity to service demand outside of the local area, including overseas export markets) and local (i.e. part of the everyday economy). The conclusion drawn is that eight of the ten highest employing clusters are 'local' clusters such as health & care, food & beverage, education & childcare, commercial services, government and personal services. This further emphasises the reliance placed on these sectors, which are by definition constrained by the size of the local market. In other words, they are not likely to be significant drivers of future growth. The key data are presented in Figure 2. This shows that key tradable clusters include Logistics and ecommerce, Civil engineering and Financial & legal services.

⁸ Emsi (2017), What's driving your regional economy? A brief analysis of the key local industry clusters in Doncaster

Figure 2: Industry clusters in Doncaster, ranked by job count



Source: Emsi analysis of ONS data (BRES)

Further analysis of economic clusters has been undertaken as part of this study, to examine additional characteristics of the clusters and to advance thinking around related activities and industrial specialisms.

Table I below identifies key characteristics of the most prominent tradeable clusters in the Doncaster economy. It presents the following data:

- Number of Activities – the number of individual industries (represented by 4-digit SIC codes) within each cluster. This indicates the depth of the cluster and the number of related activities.
- Number of High Points. A highpoint is an industry with an LQ greater than or equal to 1.25 (i.e. at least 25% more concentrated in Doncaster than in across the national economy).
- Significant High Points. The number of high points that employ at least 500 people in the Doncaster economy. This indicator helps us understand the scale of the employment base within each cluster and addresses one of the key weaknesses of examining LQs (and High Points) alone, which is that an activity can have a high LQ even when there is very little employment in the local area. This occurs where activities that do not employ very large numbers of people nationally (e.g. mining) are identified in local economies.
- Local growth rate. The Doncaster rate of employment growth (or decline) between 2010 and 2016 for a particular cluster.
- National growth rate. The national rate of employment growth (or decline) between 2010 and 2016 for a particular cluster.

An overall assessment of high points in the Doncaster economy identifies 102 such activities out of 392 activities in total. Between them, the high points contribute 66,515 employees to the Doncaster economy, representing 55% of the jobs total.

Table I: Tradeable clusters in the Doncaster economy

Cluster	Number of Activities	Number of High Points	Significant High Points	Local Growth Rate	National Growth Rate
Logistics and E-commerce	8	5	4	27%	45%
Civil Engineering	8	2	2	56%	13%
Business Services	11	1	1	49%	44%
Construction Products and Services	10	6	1	-6%	6%
Financial and Legal Services	12	2	1	5%	9%
Passenger Transport	4	1	1	57%	7%
Plastics and Vulcanised Products	8	3	1	2%	3%
Production technology	13	6	1	6%	4%
Professional Services	7	1	1	46%	33%

Source: Ortus Economic Research analysis of BRES data (ONS)

Table I highlights six clusters – Logistics & E-commerce, Civil Engineering, Construction Products & Services, Passenger Transport, Plastics & Vulcanised Products and Production Technology – which are particularly interesting. Firstly, these are tradeable clusters that therefore can access markets inside and outside the Doncaster local economy and therefore have a higher propensity to grow. Secondly, the proportion of high points that are also significant is high, which means not only are their high concentrations of employment in Doncaster within these clusters, but that the levels of employment are significant to the local economy. This indicates that these clusters are well established within the local economy and that their strength extends beyond a single, niche activity. Thirdly, in three cases they have experienced significant employment growth between 2010 and 2016 and this either mirrors or exceeds

national performance over this period. The remaining three have experienced more modest employment change over that period (with decline evidenced in Construction Products & Services).

The remaining clusters identified in Table 1 remain of great interest to this assessment of specialisms. Because the proportion of significant high points is low (they all contain just one significant high point), they should be thought of as highly specialised within the local economy by not as established or deep as those highlighted in green. In other words, their strength is more likely to lie in one important, niche activity but where related activities are not especially strong. That is not to say that supporting and related activities are unimportant or not present, but they are not identified as concentrated in Doncaster in the same way that the niche activity is. For example, the Financial & Insurance cluster is founded on niche strengths associated with credit granting and auxiliary insurance and pension services, whilst other related activities (e.g. accountants, insurers, pension funding, etc.) are not concentrated in Doncaster's economy.

A similar analysis of local clusters is presented in Table 2. It highlights eight clusters which demonstrate that they are established and significant to the local economy, as they contain numerous high points and at least one of these is a significant employer. Growth rates are again mixed across these eight clusters, with five experiencing growth of at least 9% over the period 2010 to 2016 (Health & Care, Education & Childcare, Automotive Services, Government and Local Environmental Services) and three (Building Services, Food & Beverage and Sports & Leisure) experiencing concerning levels of employment decline.

Table 2: Local clusters in the Doncaster economy

Cluster	Number of Activities	Number of High Points	Significant High Points	Local Growth Rate	National Growth Rate
Health and Care	10	5	4	11%	13%
Education and Childcare	5	3	3	15%	1%
Automotive Services	7	5	2	44%	7%
Building Services	14	5	2	-13%	6%
Government	7	3	2	9%	-17%
Commercial Services	8	1	1	18%	2%
Food and Beverage	19	8	1	-6%	14%
Local Environmental Services	6	3	1	22%	9%
Personal Services	15	2	1	-17%	0%
Sports and Leisure	9	3	1	-18%	13%

Source: Ortus Economic Research analysis of BRES data (ONS)

This evidence is helpful in identifying the Doncaster-based activities which are of national significance. However, the analysis is still largely of a 'vertical' nature, considering a narrow range of related activities within each cluster and ignoring other common factors, inputs and characteristics that clusters share such as labour markets, skills and techniques, technology, intermediary products and so on.

This study addresses these limitations and the results are presented in ensuing chapters of this report.

3.4 Economic SWOT analysis

A useful tool to support strategic planning is the SWOT analysis. This identifies Strengths, weaknesses, Opportunities and Threats and is used to provide a summary of complex information to inform strategic thinking and planning. Having considered a significant volume of existing evidence and generated new analysis to underpin an assessment of the economic conditions in Doncaster, the figure below presents a high-level SWOT analysis for Doncaster's economy.

Figure 3: SWOT analysis of Doncaster's economy

Strengths	Weaknesses
<p>Excellent accessibility, transport and infrastructure links (rail, road and air)</p> <p>An attractive natural environment</p> <p>Key tradeable sectors such as Logistics, Manufacturing, Engineering and Construction</p> <p>Key foundation sectors such as Health, Education and Retail</p> <p>Signs of encouraging levels of enterprise (i.e. new business start-ups)</p> <p>Links into key city-region strengths such as logistics, manufacturing/engineering and materials</p> <p>Significant growth in business stock</p> <p>Strong partnership working to a common goal to enhance economic prosperity for all</p>	<p>A reliance on the public sector for employment (one third of all jobs)</p> <p>Low business survival rates</p> <p>Low wage and productivity levels</p> <p>Comparatively low skilled resident population</p> <p>An ageing population</p> <p>High levels of youth unemployment</p> <p>Large numbers of economically inactive residents</p> <p>Patterns of out-commuting draws human capital out of the Borough</p> <p>Self-employment rates are low, contradicting high business start-up rates</p>
Opportunities	Threats
<p>Forthcoming investments to create creative/digital jobs (i.e. High Melton)</p> <p>Opportunities to develop a distinctive niche in rail engineering/infrastructure</p> <p>Expansion of the logistics cluster around the airport</p> <p>Building links with city-region, region and national supply chains</p> <p>Economic specialisms present in the economy which represent growth opportunities and can raise overall output and productivity</p> <p>Development and growth within the knowledge economy to drive higher productivity and wage levels</p> <p>Strong retail offer which makes Doncaster town centre comparatively viable and attractive (to attract mixed use schemes, for example).</p>	<p>Automation and the changing nature of jobs – and their specific impact on key sectors such as logistics (e.g. warehousing automation, driverless vehicles).</p> <p>Stilted employment growth means the economy is in danger of losing momentum and critical mass</p> <p>Other locations are more successful in attracting business services, creative/digital and other high value service sector jobs</p> <p>Doncaster town centre is losing critical mass as investments across the Borough draw people and jobs away from the centre</p> <p>Unless a step-change is achieved, the economy may remain low-skill and low-wage</p>

3.5 Concluding comments

Reviewing key evidence regarding the current performance of the Doncaster economy leads to the identification of the following key conclusions:

- Doncaster's economy is important to both the Sheffield City Region economy and that of Yorkshire and Humber.
- However, the economy can be typified as low skill and low value relative to both these wider economies and that of the UK overall.
- Full employment is forecast to be reached in 15 years and further growth will place additional strain on the labour market. Growing talent and attracting it to Doncaster must therefore be a key plank of the IGS.
- Successful initiatives that seek to raise the number of jobs overall and the quality/value of those jobs will help to move the Doncaster in the right direction, close the gaps on the wider economy and improve prosperity for local people, provided it is they that can take up these jobs.
- Currently, key tradeable sectors within the Doncaster economy include logistics, manufacturing and construction. However, the ability of such sectors to increase jobs, contribute further economic output and drive productivity improvements is under question.
- The dominance of local sectors in the everyday economy (such as retail, education and health & social care) is both a strength (in that large numbers of jobs are provided) and a weakness (they are limited by local demand, do not contribute significantly to an enterprise culture and have limited potential to provide more higher value jobs).
- When economic clusters are examined, it is clear that Doncaster has tradeable clusters of national significance around Logistics & E-commerce, Civil engineering, Construction Products & Services and Production technology. These should be considered as distinctive elements of the Doncaster economy. Some are well established, deeply rooted and significant in terms of employment.
- In addition, Doncaster's economy is also home to a Plastics & Vulcanised Products cluster, though this is not as significant in employment terms and should be considered as an opportunity for development rather than a highly established, deeply rooted cluster.
- Doncaster's economy lacks critical mass and depth in the services sector in general. This is a weakness that should be considered a priority for action. The services economy is increasingly important across the UK and contains many high value and design-led activities which have the propensity to provide highly paid jobs, drive growth through innovation and access demand from far and wide.

4. A strategic approach to inclusive growth

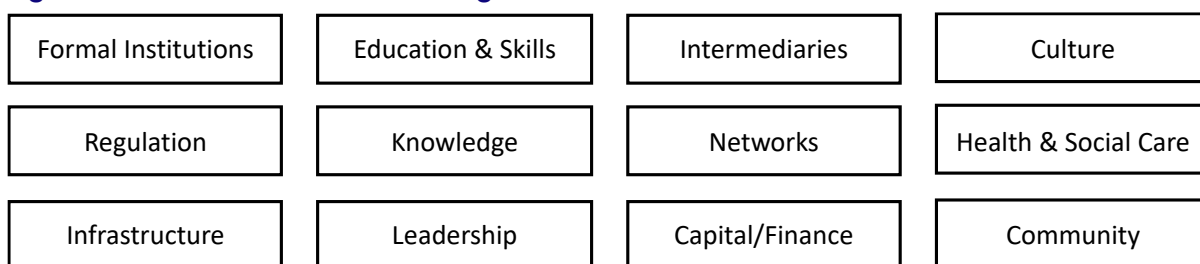
This section builds on existing evidence of the industrial specialisms in the Doncaster economy to develop two important perspectives. The first is to consider and state the strategic framework conditions for growth in Doncaster. These are the key elements which need to be considered and developed in order for maximum inclusive growth impact to be achieved. The second perspective relates to the key specialisms in the Doncaster economy which, based on examination of a range of key evidence both quantitative and qualitative, this study has found to be crucial to an inclusive growth strategy that aims to create more and better jobs. These two elements are of course highly related.

4.1 Framework conditions for growth

The nature of local government has changed and continues to change. Historically, the role of local government has been to assume an important role in the economic management of place, which has in turn enabled it to respond to local needs. However, the reduction of budgets has restricted the capacity of local government to maintain and deliver public services. While some local governments have responded by assuming a more interventionist approach, others have sought to pursue more engaged and innovative approaches towards addressing local challenges in partnership with different civic stakeholders to build local capacity and capabilities. In this way, the role of local government here can be understood as to develop horizontal policy measures designed to create favourable framework conditions in the interest of the local economy and society.

It is widely acknowledged that creating effective framework conditions for growth are critical. As shown in Figure 4, framework conditions can include a range of factors that may be addressed by government at different scales. The importance of national framework conditions for regional performance are paramount, especially in a highly centralised economy such as the UK. However, the growing emphasis on devolved decision making through Local Industrial Strategies is seeing the prominence of Local Enterprise Partnerships and Local Authorities. Clearly, Doncaster is an important place in the Sheffield City Region and needs to ensure that the interests of the Metropolitan Borough are represented in the emerging Local Industrial Strategy. While typically 'economic', framework conditions at the local scale are equally relevant to creating the conditions for enhancing civic and social life in Doncaster.

Figure 4: Framework conditions for growth



The value of thinking in terms of frameworks and emphasising more horizontal cross-cutting ways of working do not need to be at odds with more traditional sectoral forms of policy thinking. Indeed, the horizontal cross-cutting measures coupled with the platform-based approach outlined below can be seen to characterise a more proactive approach towards policy making. Typically, the emphasis of such horizontal approaches has been aimed at securing the economic and industrial competitiveness of places. In the case of Doncaster, developing the framework conditions and cross-cutting strengths are part of the wider ambitions of the DGT programme.

Consequently, and further to strengthening national and regional framework conditions for growth, DMBC performs an important role in enhancing framework conditions locally. Central to this is the ability of the local authority to engage and connect a broad range of actors and organisations across different projects and programmes. Ensuring that local planning is connected and coordinated is imperative to ensure that the efforts of the public sector generate the greatest economic and social returns in fostering more inclusive growth in Doncaster. One of the challenges for DMBC associated with horizontal cross-cutting frameworks is ensuring what are predominantly supply-side measures to stimulate private sector demand.

Doncaster, like other places, needs to identify a local economic development strategy that works. However more than an economic development strategy, the DGT programme can be understood to bring together key local civil stakeholders and institutions from across the public and private sector to work together in creating Doncaster as a participatory, productive and prosperous place. What works well in one place will not translate directly to other places, and therefore understanding the strengths of Doncaster, as well as national and regional framework conditions, will inform the inclusive growth strategy of DMBC. In strengthening the framework conditions in Doncaster, the research highlighted a number of areas that warrant further consideration by DMBC.

Doncaster has a number of key economic assets that are distributed across the Metropolitan Borough, including the iPort, Doncaster Sheffield Airport, and the Waterfront which have become focal points for business activity. The strength of the rail sector has again come to the fore in Doncaster and represents a significant opportunity for growth in related engineering and technology sectors. In addition, the emerging CDI platform, based around the investment of 360 Degrees Media at the High Melton site, represents a significant demand-side opportunity for growth in the Metropolitan Borough. The breath of activity across different sectors has potential for resilient growth, with potential to increase both the number and quality of jobs around these key assets.

To achieve this, there is a need to move beyond traditionally siloed sectors to promote working across sectors. The platform-based approach, as detailed below, identifies the opportunity to build on sector strengths where there is not necessarily the critical mass necessary for growth by capitalising on related variety. Thinking and working across sectors, and platforms, is important for future growth and connecting with existing assets outside of the Metropolitan Borough, most notably the Advanced Manufacturing Research Centre. In building the strength of the platform in Doncaster there remains a need to support the engagement and embeddedness of companies that export outside of the region – and internationally – to maximise the potential of tradeable goods and services. In this respect, the work of Business Doncaster remains critical.

Further to the business base, the presence of the National High-Speed Rail College (NHSRC) and the recently approved plans for the Doncaster UTC, provide the basis of a strong educational offer. In addition, these 2 prominent examples are further augmented by the VFX academy, University City, and exiting improving college provision in Doncaster. Given the educational profile in Doncaster, these new education and training facilities offer the potential for skills-led growth in the Metropolitan Borough. This is a critical opportunity for the current and future working population in the Metropolitan Borough for training, retraining and professional development, as well as for businesses in Doncaster to benefit from higher skilled workers. While there is a possibility that the education and training provision offered by these high-profile will attract learners from outside of Doncaster and the City Region, this should not be regarded as a negative but rather affirm their national significance. The challenge is to ensure that businesses recognise the value of co-locating near education and training providers, which could lead to a new skills-led cluster around the emergent platforms.

As noted above, the economic assets in Doncaster are located across the Metropolitan Borough. Clearly, the road and rail (and now air) infrastructures have been crucial to Doncaster emerging as a centre for

logistics. However, the public transport infrastructure within the Metropolitan Borough is comparatively poor. This, coupled with many of the jobs being located outside of the town centre, has, and continues to have implications for the regeneration and redevelopment of the town centre. Notably, the town centre can be seen as overdependent on retail, which is unlikely to meaningfully deliver growth. Indeed, the low density of workers in the town centre has implications for sustaining the retail offer and moreover the leisure offer associated with the town centre.

The commitment of DMBC is to renew the urban realm through key transformational projects. This has been evident in the redevelopment of the Civic Offices, the new theatre development and the regeneration of the market, as well as the anticipated redesign of the station and development of a new cinema complex. The support of DMBC in delivering these flagship projects is critical to renewing the image of Doncaster locally and beyond. That said, there appears to be a caution, if not resistance, to investing in office space, which is viewed as too high-risk. While there are a number of examples of more knowledge-intensive employers locating jobs in the town centre (i.e. Highfields, DSW, MyPensionExpert) there remains a need to attract more knowledge-intensive jobs in Doncaster. The issue becomes a catch 22, with the lack of appropriate real-estate meaning that potential investors do not look at locating in Doncaster's town centre.

The 'lack of an offer' was a phrase repeatedly used in the interviews, referring both to the regeneration of the town centre and the lack of AI office space but also the lack of developed sites around the Metropolitan Borough. While two-thirds of the land around Doncaster is rural, much remains undeveloped, which can be a challenge for inward investors. There is a growing consensus that, rather than considering any investment as good investment, the inward investment strategy needs to become more selective and challenge the status quo. However, in order to ensure that key investments, such as those associated with the global innovation corridor around the airport, do not experience unnecessary delays, there needs to be a more proactive approach towards development.

DMBC and the wider DGT partnership represents a strong institutional basis for growth. That said, there is a need to ensure that the policies and programmes in place are accepted by and work with the local population to deliver inclusive growth. Fundamentally, this demands a raising of the aspirations and ambition of people in Doncaster. While the Local Authority might take the lead on building civic pride through an initiative that it is both leading and involved in, there is a need to build this through the people of Doncaster. There remains a need to foster cultural change at a grass roots level, tackling the issue of 'wage labour' (i.e. to move away from competing on the basis of low-skilled and low-cost labour) by raising the visibility of successes and celebrating these strengths and their successes, rising confidence and creating a virtuous circle.

Arguably the central role of DMBC in developing the framework conditions in Doncaster is ensuring the coherence and coordination of these horizontal and cross-cutting domains of local government. The research has indicated that there are numerous framework conditions that need to be considered as part of the DGT strategy, aiming to stimulate inclusive growth in Doncaster. Further to the importance of the framework conditions, the following section outlines the case for a platform base approach that seeks to bring together related industrial sectors as the basis for focused industry-led growth and future specialisation.

A central challenge in developing framework conditions for inclusive growth, as is the case in Doncaster, is to understand how different aspects and domains are inter-related and interdependent. While recognising that the political leadership is subject to election cycles, the framework conditions involve a number of longer and shorter-term objectives that need sustained commitment if Doncaster is to realise its inclusive growth ambition. Continuity and commitment to the overall strategy of the DGT is necessary to deliver the framework conditions for what is an ambitious and wide-ranging plan for the economic and societal development of Doncaster as a key town in South Yorkshire.

4.1.1 Integrating framework conditions and specialisms

The research has indicated that there are numerous framework conditions that need to be covered in a strategy to stimulate growth through development of the economic platforms within Doncaster. Due consideration of each of these within such strategies and plans will mean that the overall impact achieved will be maximised, as solutions can be designed which relate to or take account of multiple framework conditions. The major strategic considerations for Doncaster's IGS therefore are as follows:

- Role of and threats to the viability of the town centre.
- Tapping into wider opportunities and initiatives (e.g. links to the Industrial Strategy and Grand Challenges, Global Innovation Corridor, etc.)
- Understanding Doncaster's role in the wider city-region and regional economy
- The importance of the knowledge economy (including CDI) and broader services offer, and ensuring Doncaster has a suitable offer around office accommodation
- The need for a long-term plan that will traverse political cycles, including a sustainable vision and action plan
- Stimulating a balanced economy, which delivers more high end jobs whilst also providing opportunities for local people in the short term
- Building an educational offer which serves current needs but also fit for the future (i.e. a more highly skilled economy)
- Having an ambitious, opportunistic outlook and plans to support this. To include risk taking
- Focusing on synergies between platforms to maximise resilience and spill-over impacts.⁹
- Tackling cultural change

4.2 'Platforms' and how they contribute to the IGS

The report has introduced above the notion of an economic 'platform' and comment briefly on why such an approach has merit. We elaborate on this argument below and present the rationale for introducing this perspective into the IGS.

The traditional approach to identifying 'specialisms' within an economy is to undertake analysis of economic activities defined by SIC codes (or groups). This is helpful in identifying the specific activities that differentiate one place from another based on an assessment of density, concentration or location quotients.

A sector-led approach also allows for bespoke support led by those experienced in working in a particular area of economic activity to apply that expertise and to engage with the private sector from an informed position. This has many benefits, including gaining the trust and confidence of those private sector companies.

However, contemporary thinking (supported, for example, by guidance from the What Works Centre for Economic Growth⁹ as well as advice received by the Council from the Centre for Cities, which warned of the dangers of over-specialising but instead encouraged the development of agglomerated economies and placed an emphasis on skills) indicates that there is support for developing a different, more holistic perspective on specialisms.

This approach – which we call 'Platforms' – is based on a horizontal assessment of specialisms across the local economy. It is very much informed and influenced by the 'vertical' assessment of sectors and clusters that has been undertaken in the past, but it considers how these specialisms link up across

⁹ See <http://www.whatworksgrowth.org/resources/developing-an-effective-local-industrial-strategy/>

sectors and industries to identify specialisms which are more comprehensive and embedded across the economy.

For example, the Engineering & Technology platform includes not only the elements of the economy that deliver engineering or technology products/services, but those that rely on engineering and technology as a set of skills, tools or inputs to be successful. This means that elements of manufacturing, construction, consultancy and so on are included based on shared processes, outputs, skills and inputs.

The key benefits of taking a platforms approach are:

- Adopting a Platforms approach necessitates a more holistic approach to economic development. It is also more inclusive, because it allows the plan to move away from the ‘picking winners’ approach which is readily criticised.
- One of Doncaster’s challenges is the lack of critical mass in specialist sectors. The Platforms approach allows the Council to develop initiatives which are targeted at specialisms within the economy which have a greater critical mass – and this has a number of benefits (e.g. development of transferable skills, increased likelihood of spill-overs such as business start-up, supply chain development, etc).
- The Platforms approach allows the identification of capabilities and opportunities which align well with national and sub-regional initiatives (e.g. Future Mobility as one of the four Grand Challenges of the Industrial Strategy).
- It builds from the pre-requisite that the major themes associated with economic development – Skills, Infrastructure, Commercial space, Innovation etc – are all crucially important in their own right but that the Platforms provide focus and inform decision making. In general, the Platforms approach provides the basis on which relevant policies can be targeted.
- Adopting Platforms means giving due consideration to how investment, strategy and policy decisions may impact the wider goal of enhancing the economic growth potential of these Platforms in the future.
- The platforms approach allows for a high degree of flexibility in choice of specific intervention, whereas by contrast, sector approach creates boundaries which restrict this flexibility.
- The Platforms approach supports the goal of developing a workforce with transferable skills because it takes a more holistic approach to defining and developing specialisms, supports supply-chain development and encourages cross-sectoral working and collaboration.

4.3 Platforms in the Doncaster economy

This section presents the key findings regarding the specialisms in the Doncaster economy that the evidence indicates should be considered as the Platforms for growth in the future. A crucial point is that a strategy for Platforms should not be exclusive. It must recognise that the whole economy is important and that inclusive growth requires attention to be paid to all businesses and jobs. However, any strategy must focus on strengths and mitigate weaknesses, identify and capitalise on opportunities and address threats. An inclusive growth strategy for Doncaster therefore must include, as a key element, a degree of focus on distinctive characteristics of the Doncaster economy, in order to capitalise and build on competitive advantage. By identifying the specialisms within the Doncaster economy, this study is providing evidence of the Platforms that can be stimulated and developed to drive growth in the future.

The identification of Platforms for growth requires more than simply a consideration of the key industry strengths as represented by employment concentrations in sectors and SIC codes. As described above, it requires a more holistic assessment that is horizontal in nature, looking across the economy rather than down into sectors.

Having considered all the evidence, both quantitative and qualitative, this study finds that the key Platforms in the Doncaster economy are:

- Established Platform - Engineering & Technology
- Established Platform - Future Mobility (including Rail)
- Opportunity Platform - Advanced Materials
- Opportunity Platform - Creative & Digital

Evidence of their current scale and potential impact on growth in Doncaster is presented below.

4.4 Platforms in the Doncaster economy

This section examines the four key Platforms for growth in the Doncaster economy and which represent local economic specialisms: Engineering & Technology, Future Mobility, Advanced Materials and Digital & Creative. It describes their current size and scale, and sets out what they might contribute to economic growth under three future scenarios.

In addition, it comments on Support Services, which is currently not to be considered a specialism or strengths within the Doncaster economy, but is so crucial to a modern economy that it cannot be ignored.

The three scenarios are based on those developed by Peter Brett Associates¹⁰ to consider needs and targets for employment land and housing in Doncaster over the period 2015–2032, and include:

- a Baseline scenario which assumes a business-as-usual view of Doncaster's economic future;
- an Aspirational scenario, in which the Doncaster economy fulfils local policy aspirations of jobs growth of 1% per year, but in which population increase is the same as the Baseline scenario and local labour supply does not fully meet demand; and
- a rebalanced Jobs-led scenario, in which the Doncaster population increases so that local labour supply fully meets the demand generated by jobs growth of 1% per year.

¹⁰ Peter Brett Associates, *Economic Forecasts and Housing Needs Assessment*, June 2018

The analysis presented below combines projected employment change by sector in Peter Brett Associates’ scenarios with projected changes in productivity by sector from the Regional Economic Model, in order to calculate future employment, Gross Value Added (GVA)¹¹ and productivity.

Table 3 shows the results of each scenario for Doncaster as a whole. The subsequent sections present results for each of the four platforms identified. More detailed projections for the sectors within each platform can be found in Appendix I (page 37).

Table 3: Projected employment, GVA and productivity, Doncaster, 2016–2032

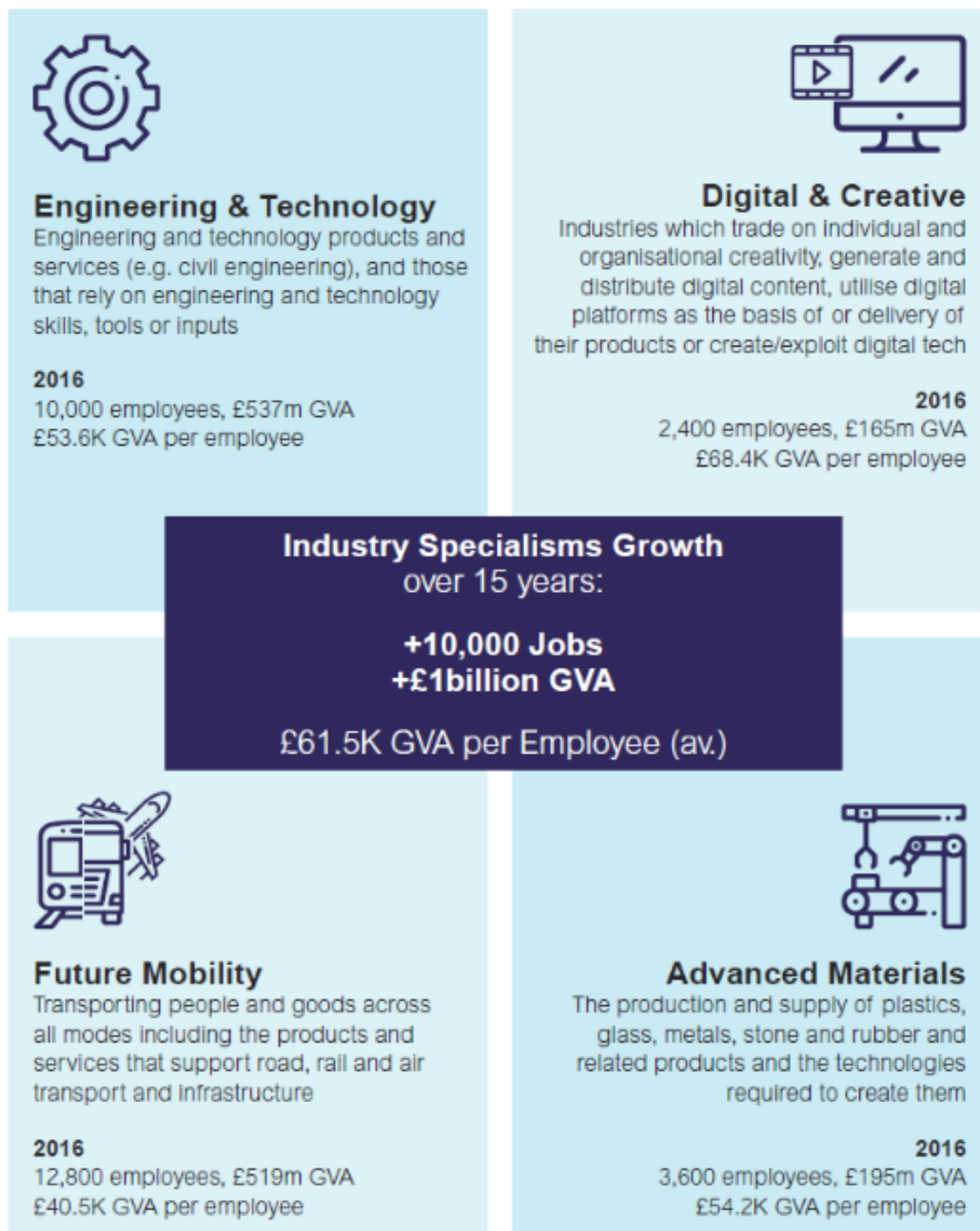
Scenario	Employment			GVA			Productivity (GVA per employee)		
	2016	2032	Change	2016 (£m)	2032 (£m)	Change	2016 (£000s)	2032 (£000s)	Change
Baseline	134,800	147,800	9.6%	£6,934	£9,402	35.6%	£51.4	£63.6	23.7%
Aspirational	134,800	146,800	8.9%	£6,931	£9,339	34.7%	£51.4	£63.6	23.7%
Job-led	135,600	160,600	18.5%	£6,969	£10,134	45.4%	£51.4	£63.1	22.7%

Source: Ortus Economic Research

These future outcomes are also summarised in Figure 5 below.

¹¹ Gross Value Added (GVA) is a measure of the value of goods and services produced in a particular area, industry or sector of an economy. GVA per employee is a useful way of comparing different parts of the economy.

Figure 5: Projected employment, GVA and productivity for the four platforms in the Job-led scenario, Doncaster, 2016–2032¹²



Source: Doncaster Inclusive Growth Strategy 2018, Analysis by Ortus Economic Research and University of Sheffield

¹² Note that the projections for Creative & Digital include the anticipated investment at High Melton by 360 Media, which is anticipated to deliver impacts that are additional to those evidenced in the forecasts that form part of the Local Plan evidence base (i.e. PBA, Economic Growth and Housing Need Assessment)

4.5 Engineering & Technology

The Engineering & Technology platform includes a wide range of engineering and technology products and services, and those that rely on engineering and technology skills, tools or inputs. Some 425 firms in Doncaster were active in Engineering & Technology in 2016 (2% of all firms in Doncaster), employing 9,800 people (7% of employment). Employment in Doncaster is more highly concentrated in Engineering & Technology than the UK average, with a location quotient (LQ) of 1.43¹³.

Between 2010 and 2016, employment in Engineering & Technology in Doncaster grew by 21%, compared with growth of 6% in the UK. The Baseline and Aspirational scenarios each project slight falls in employment between 2016 and 2032. The Job-led scenario projects employment growth of 37% over the same period (to 13,800 people, 9% of total employment in Doncaster in 2032), with notable growth in particular in civil engineering, freight rail transport and some manufacturing sectors within the platform.

Each employee in Engineering & Technology in Doncaster generated an average £53,600 in GVA in 2016 (1.04 times the average level of productivity across all employees in Doncaster). Productivity in Engineering & Technology is projected to rise at a faster rate than the Doncaster average, by around 29% in the Baseline and Aspirational scenarios to an average £69,200 in GVA per employee in 2032, and by around 28% in the Job-led scenario to an average £68,500 in GVA per employee (1.09 times the average level of productivity in Doncaster).

Engineering & Technology firms in Doncaster contributed more than £525m in Gross Value Added (GVA) to the economy in 2016 (8% of total GVA in Doncaster firms). Despite projected employment decline in the Baseline and Aspirational scenarios, both project an increase of round 25% in Engineering & Technology GVA between 2016 and 2032, driven by productivity gains. The Job-led scenario combines these productivity gains with jobs growth, and projects an increase of 75% in Engineering & Technology GVA over the same period, to £943m (9% of total GVA in Doncaster firms in 2032).

Importantly, the jobs-led approach would deliver an additional 4,300 jobs and £286m in GVA above the baseline projection.

Table 4: Projected employment, GVA and productivity in Engineering & Technology, Doncaster, 2016–2032

Scenario	Employment			GVA			Productivity (GVA per employee)		
	2016	2032	Change	2016 (£m)	2032 (£m)	Change	2016 (£000s)	2032 (£000s)	Change
Baseline	9,800	9,500	-3.1%	£525	£657	25.1%	£53.6	£69.2	29.1%
Aspirational	9,800	9,400	-3.7%	£525	£653	24.3%	£53.6	£69.2	29.1%
Job-led	10,000	13,800	37.2%	£537	£943	75.5%	£53.6	£68.5	27.9%

Source: Ortus Economic Research

4.6 Future Mobility

Firms in the Future Mobility platform are involved in transporting people and goods across all modes, as well as in providing the products and services that support road, rail and air transport and infrastructure. 975 Doncaster firms operated in Future Mobility in 2016 (4% of all firms in Doncaster), employing 12,600

¹³ Location quotients (LQs) are a standardised measure of concentration. An LQ of 1.0 indicates that the concentration of firms within an area matches the national average. An LQ of 1.5 means that there is 50% more of a particular activity in the area than one might expect to find compared with the national average. Conversely, an LQ of 0.5 means that there is 50% less of an activity in the area than one might expect.

people (9% of employment). Employment in Doncaster is highly concentrated in Future Mobility compared with the UK average, with a location quotient (LQ) of 2.73.

Employment in the Future Mobility platform in Doncaster grew by 36% between 2010 and 2016, compared with growth of 32% in the UK. The Baseline and Aspirational scenarios each project further growth of around 12% between 2016 and 2032. The Job-led scenario projects employment growth of 50% over the same period (to 19,200 people, 12% of total employment in Doncaster in 2032), with notable growth in particular in warehousing and storage, freight transport, rail construction, and service activities such as the operation of freight terminals and passenger facilities.

Each employee in the Future Mobility platform in Doncaster generated an average £40,500 in GVA in 2016 (0.79 times the average level of productivity across all employees in Doncaster). Productivity in the Future Mobility platform is projected to rise at a similar rate to the Doncaster average, by around 22% in all three scenarios, with the Baseline and Aspirational scenarios projecting an average £49,600 in GVA per employee in 2032, and the Job-led scenario projecting an average £49,400 in GVA per employee (0.78 times the average level of productivity in Doncaster).

Future Mobility firms in Doncaster contributed almost £510m in GVA to the economy in 2016 (7% of total GVA in Doncaster firms). Productivity gains mean that the Baseline scenario projects an increase of 38% in Future Mobility GVA between 2016 and 2032, while the Aspirational scenario projects an increase of 37% over the same period. The Job-led scenario projects an increase of 83% in Future Mobility GVA between 2016 and 2032, to more than £949m (9% of total GVA in Doncaster firms in 2032).

Note that the jobs-led approach would deliver an additional 5,100 jobs and £248m in GVA above the baseline projection.

Table 5: Projected employment, GVA and productivity in Future Mobility, Doncaster, 2016–2032

Scenario	Employment			GVA			Productivity (GVA per employee)		
	2016	2032	Change	2016 (£m)	2032 (£m)	Change	2016 (£000s)	2032 (£000s)	Change
Baseline	12,600	14,100	12.4%	£510	£701	37.5%	£40.5	£49.6	22.4%
Aspirational	12,600	14,000	11.7%	£510	£697	36.7%	£40.5	£49.6	22.4%
Job-led	12,800	19,200	50.0%	£519	£949	82.8%	£40.5	£49.4	21.8%

Source: Ortus Economic Research

For this platform in particular, it is important to be cognisant of the changing nature of work. The increasing use of technology within the logistics sector, and predictions for how AI will influence the way that people and goods are moved around (within warehouses and between locations) mean that significant change should be anticipated within this platform. Employment numbers and densities may well drop within some activities, but other opportunities will emerge. These include the increasingly high level of skills required for jobs in logistics and transport (e.g. designing, implementing and managing technology), opportunities to provide high-tech services to the mobility sector and the creation of new technologies for which there will be increasing demand.

4.7 Advanced Materials

The Advanced Materials platform involves the production and supply of plastics, glass, metals, stone and rubber and related products, and the technologies required to create them. The Advanced Materials platform included 50 firms in 2016 (less than 1% of all firms in Doncaster), employing 3,500 people (3%

of employment). Employment in Doncaster is highly concentrated in Advanced Materials compared with the UK average, with a location quotient of 3.23.

Between 2010 and 2016, employment in Advanced Materials in Doncaster fell by 19%, compared with slight growth of 1% in the UK as a whole. The Baseline and Aspirational scenarios each project further decline in Doncaster, with employment falling by around 27% between 2016 and 2032. The Job-led scenario projects employment growth, with an increase of 7% over the same period to 3,800 employees. However, this represents a fall in the Advanced Materials platform's share of total employment, to 2% of total employment in Doncaster in 2032.

Each employee in Advanced Materials in Doncaster generated an average £54,200 in GVA in 2016 (1.05 times the average level of productivity across all employees in Doncaster). Productivity in Advanced Materials is projected to rise at a faster rate than the Doncaster average, by around 31% in all three scenarios, to an average £70,800 in GVA per employee in 2032 in the Baseline and Aspirational scenarios, and to an average £70,900 in GVA per employee in the Job-led scenario (1.12 times the average level of productivity in Doncaster).

In 2016, Advanced Materials firms in Doncaster contributed more than £190m in GVA to the economy (3% of total GVA in Doncaster firms). Despite productivity gains, projected employment decline in the Baseline and Aspirational scenarios mean that Advanced Materials GVA is projected to decline in both scenarios between 2016 and 2032, by 4% and 5% respectively. In contrast, the Job-led scenario projects an increase of 39% in Advanced Materials GVA over the same period, to more than £271m (3% of total GVA in Doncaster firms in 2032).

Crucially, the jobs-led approach would deliver an additional 1,200 jobs and £89m in GVA above the baseline projection.

Table 6: Projected employment, GVA and productivity in Advanced Materials, Doncaster, 2016–2032

Scenario	Employment			GVA			Productivity (GVA per employee)		
	2016	2032	Change	2016 (£m)	2032 (£m)	Change	2016 (£000s)	2032 (£000s)	Change
Baseline	3,500	2,600	-26.6%	£190	£182	-4.2%	£54.2	£70.8	30.5%
Aspirational	3,500	2,600	-27.1%	£190	£181	-4.8%	£54.2	£70.8	30.5%
Job-led	3,600	3,800	6.5%	£195	£272	39.3%	£54.2	£70.9	30.7%

Source: Ortus Economic Research

4.8 Digital & Creative

The Digital & Creative platform includes industries which trade on individual and organisational creativity, generate and distribute digital content, utilise digital platforms as the basis of or delivery of their products or create and exploit digital technology.

Some 480 firms were active in the Digital & Creative platform in Doncaster in 2016 (2% of all firms in Doncaster), employing 2,400 people (2% of employment). Employment in Doncaster is less concentrated in the Digital & Creative platform than the UK average, with a location quotient of 0.30.

Employment in the Digital & Creative platform in Doncaster rose by 3% between 2010 and 2016, compared with growth of 18% in the UK. All three scenarios project continued employment growth in Doncaster between 2016 and 2032, each at similar levels – around 11% growth in the Baseline scenario, around 10% in the Aspirational scenario and around 12% in the Job-led scenario. The Job-led scenario projects 2,700 employees in the Digital & Creative platform in Doncaster in 2032 (2% of total

employment in Doncaster in 2032). Note that these figures do not include the development at High Melton Studios – see the sub-section below.

Each employee in the Digital & Creative platform in Doncaster generated an average £68,400 in GVA in 2016 (1.33 times the average level of productivity across all employees in Doncaster). Productivity in the Digital & Creative platform is projected to rise at a faster rate than the Doncaster average, by around 29% in the Baseline and Aspirational scenarios to an average £69,200 in GVA per employee in 2032, and by around 28% in the Job-led scenario to an average £27,900 in GVA per employee (1.43 times the average level of productivity In Doncaster).

In 2016, Digital & Creative firms in Doncaster contributed almost £165m in GVA to the economy (2% of total GVA in Doncaster firms). Based on projected productivity gains, the three scenarios each project similar rates of growth in GVA between 2016 and 2032 – an increase of around 46% in the Baseline scenario, around 45% in the Aspirational scenario and around 47% in the Job-led scenario. The Job-led scenario projects Digital & Creative GVA of almost £243m in 2032, 2% of total GVA in Doncaster firms.

In this analysis (excluding High Melton Studios), the jobs-led approach could deliver the same number of jobs and just £2m additional GVA compared to the baseline projection.

Table 7: Projected employment, GVA and productivity in Digital & Creative, Doncaster, 2016–2032

Scenario	Employment			GVA			Productivity (GVA per employee)		
	2016	2032	Change	2016 (£m)	2032 (£m)	Change	2016 (£000s)	2032 (£000s)	Change
Baseline	2,400	2,700	10.8%	£165	£241	46.3%	£68.4	£90.4	32.1%
Aspirational	2,400	2,600	10.1%	£165	£239	45.3%	£68.4	£90.4	32.1%
Job-led	2,400	2,700	11.8%	£165	£243	47.1%	£68.4	£90.1	31.6%

Source: Ortus Economic Research

4.8.1 Digital & Creative – projections including High Melton Studios

The projections above do not take account of the development of a film, television and technology hub at High Melton Studios, led by 360 Media. This is a very significant development and opportunity for Doncaster. It is seen as having the potential to stimulate significant new economic activity, not only in the film, television and technology sectors, but across a broader range of creative and other industries. From a strategic standpoint, it is seen as a potential catalyst for the development of a distinctive digital and creative cluster with real breadth and depth.

The potential impact of High Melton Studios is not included in the core projections (in Table 7 above). This is because the underlying assumptions are drawn from the Economic Growth and Housing Needs Assessment study by Peter Brett Associates, which uses standard economic forecasts. Understandably, these do not anticipate nascent or future developments.

However, given the importance and scale of the high Melton project to the Digital and Creative platform, there is a need to anticipate the impact of the project in the projections presented here.

Beginning in 2018, this development is projected to support 1,040 jobs and £64m in GVA¹⁴. Combining these impacts with our main projections (in Table 7 above) suggests that growth in the Digital & Creative platform in Doncaster between 2016 and 2032 will be significant. In all three scenarios, employment in the Digital & Creative platform rises by more than 50% over this period, while Digital & Creative GVA rises by around 85%. Productivity also improves, though the projected gains are slower when the impacts of the High Melton Studios development are combined with platform growth, compared with each

¹⁴ Regeneris Consulting & 360 Degrees Media, *Economic Impact of High Melton Studios Development*, November 2017.

scenario alone. This is likely to be driven by the assumptions made around productivity within the Regeneris analysis, the implication being that the figures used are a little lower than those in our analysis.

In this analysis (excluding High Melton Studios), the jobs-led approach could deliver the same number of jobs and just £2m additional GVA compared to the baseline projection. There would likely be a catalytic, supply chain effect which has not been captured in this analysis, however, brought about by a wider stimulation of the Doncaster economy and the Digital & Creative specialism more specifically. Such catalytic effects could add further to the growth that could be achieved through an approach focused on Platforms, beyond even the most ambitious scenario described by these forecasts.

Table 8: Projected employment, GVA and productivity in Digital & Creative including the impact of High Melton Studios development, Doncaster, 2016–2032

Scenario	Employment			GVA			Productivity (GVA per employee)		
	2016	2032	Change	2016 (£m)	2032 (£m)	Change	2016 (£000s)	2032 (£000s)	Change
Baseline	2,400	3,700	54.0%	£165	£305	85.2%	£68.4	£82.3	20.3%
Aspirational	2,400	3,700	53.2%	£165	£303	84.3%	£68.4	£82.2	20.3%
Job-led	2,400	3,700	55.1%	£165	£307	86.0%	£68.4	£82.1	19.9%

Source: Ortus Economic Research / Regeneris Consulting & 360 Degrees Media

4.9 Supporting Services

A focus on the four platforms described above is not to the exclusion of other parts of the Doncaster economy, which will offer their own contributions to growth. In particular, the Supporting Services platform – comprising a range of professional and business services sectors – is a large employer in Doncaster, projected to grow.

Some 2,470 firms were active in Supporting Services in Doncaster in 2016 (11% of all firms in Doncaster), employing 13,000 people (10% of employment). Employment in Doncaster is less concentrated in Supporting Services than the UK average, with a location quotient of 0.71.

Employment in Supporting Services in Doncaster rose by 41% between 2010 and 2016, compared with growth of 33% in the UK. The Baseline scenario projects growth of around 17% between 2016 and 2032, while the Aspirational scenario projects growth of around 16%. The Job-led scenario projects employment growth of 19% over the same period, to 15,500 people (10% of total employment in Doncaster in 2032).

Each employee in Supporting Services in Doncaster generated an average £35,500 in GVA in 2016 (0.69 times the average level of productivity across all employees in Doncaster). Productivity in Supporting Services is projected to rise at a faster rate than the Doncaster average, by around 50% in the Baseline and Aspirational scenarios to an average £53,200 in GVA per employee in 2032, and by around 49% in the Job-led scenario to an average £53,000 in GVA per employee (0.84 times the average level of productivity in Doncaster).

In 2016, Supporting Services firms in Doncaster contributed more than £461m in GVA to the economy (7% of total GVA in Doncaster firms). Productivity gains mean that the Baseline scenario projects an increase of 75% in Supporting Services GVA between 2016 and 2032, while the Aspirational scenario projects an increase of 74% over the same period. The Job-led scenario projects an increase of 78% in Supporting Services GVA between 2016 and 2032, to almost £823m (8% of total GVA in Doncaster firms in 2032).

The projections indicate that the jobs-led scenario could deliver 300 additional jobs and £15m in GVA compared to the jobs-led scenario.

Table 9: Projected employment, GVA and productivity in Supporting Services, Doncaster, 2016–2032

Scenario	Employment			GVA			Productivity (GVA per employee)		
	2016	2032	Change	2016 (£m)	2032 (£m)	Change	2016 (£000s)	2032 (£000s)	Change
Baseline	13,000	15,200	16.8%	£461	£807	74.9%	£35.5	£53.2	49.7%
Aspirational	13,000	15,100	16.1%	£461	£802	73.8%	£35.5	£53.2	49.7%
Job-led	13,000	15,500	19.3%	£462	£823	77.9%	£35.5	£53.0	49.2%

Source: Ortus Economic Research

4.10 Net impact of specialisms growth

It is important to recognise that the definitions of the platforms are not mutually exclusive. There is therefore a degree of double-counting in the analysis. If double-counting is excluded, the net impact of growth across the four specialisms (and based on the most ambitious, jobs-led scenario), would be:

- An increase in employment from around 22,300 in 2016 to 31,400 in 2032 (an increase 9,100 jobs, or 41%)
- An increase in GVA from around £1.08bn in 2016 to £1.88bn in 2032 (an increase of £0.8bn or 74%)
- An increase in average GVA per head from around £48,400 in 2016 to £59,800 in 2032 (an increase of £11,400 or 23%)

If double-counting is excluded from the analysis of Supporting Services and also based on the most ambitious scenario, the net effect would be:

- An increase in employment from around 12,500 in 2016 to 14,900 in 2032 (an increase of 3,400 jobs, or 19%)
- An increase in GVA from around £0.4bn in 2016 to £0.8bn in 2032 (an increase of £0.4bn, or 79%)
- An increase in average GVA per head from around £34,800 in 2016 to £52,000 in 2032 (an increase of £17,200, or 50%)

4.11 Concluding comments

The analysis above has shown how four different specialisms within the Doncaster economy – when considered as Platforms for growth – might develop under three different scenarios, and what they might contribute to economic growth. The potential contribution of each is different, reflecting differences in their current size and scale, and the rate at which productivity is projected to improve in each:

- The Engineering & Technology platform is a large employer, with the most ambitious scenario projecting future employment growth. Productivity gains mean that even in the less ambitious scenarios, which project some employment decline, Engineering & Technology's contribution to the economy in terms of GVA will increase.
- The Future Mobility platform represents a significant specialism in the Doncaster economy, and employment is projected to continue to grow. Productivity is projected to improve at a similar rate to the Doncaster average.

- The Advanced Materials platform also represents a significant specialism in the Doncaster economy. Employment has declined in recent years, and while the most ambitious scenario projects future growth, this will be at a slower rate than the Doncaster average. Productivity is projected to improve at a faster rate than average, and GVA is also projected to increase in this scenario.
- The Digital & Creative platform is smaller, and represents less of a specialism in the Doncaster economy. In recent years, Digital & Creative employment in Doncaster has not grown as fast as across the UK as a whole, though the forthcoming development at High Melton Studios has the potential to transform this platform. Productivity in the Digital & Creative platform is high, and is projected to improve at a faster rate than average, suggesting this platform will become increasingly important. The prospect of the High Melton investment by 360 Media means this Platform should be considered as an important growth driver for the future.

Other parts of the economy will also contribute to future growth, of course. In particular, the Supporting Services platform is a large employer in Doncaster, which is projected to grow. While productivity in Supporting Services is lower than the Doncaster average, it is projected to improve at a faster rate than average.

5. Conclusions and recommendations

This section summarises the key findings of this study and makes a number of recommendations to the Council and partners regarding further work and how platforms can be integrated into the IGS.

5.1 Conclusions

Doncaster's economy is significant within and important to both the Sheffield City Region economy and that of Yorkshire and Humber. However, the economic and social challenges faced within Doncaster are well documented and the development of an Inclusive Growth Plan is an important step in building momentum and energy around a strategy to tackle these challenges through economic growth that benefits all.

An important part of the future inclusive growth approach must be to build on current strengths within and distinctive aspects of the local economy. Identifying these unique aspects of the economy and building on them to create further competitive advantage makes sense for a range of reasons. Firstly, competitive advantages and unique economic characteristics are difficult for other competing locations (within and outwith the UK) to replicate. Second, in terms of resource requirements, building on existing strengths is significantly more efficient (and less risky) than attempting to build new ones. And thirdly, historic economic evidence suggests that future growth is likely to be founded on past strengths.

Currently, the Doncaster economy has a number of dominant sectors that provide large numbers of jobs. These include logistics, manufacturing and construction, retail, education and health & social care. The first three of these are 'tradeable' and therefore offer greater growth potential, whilst the latter three service local demand and are important parts of what could be termed the 'everyday' economy.

Adding further depth of insight to this, an examination of economic clusters indicates that Doncaster has tradeable clusters of national significance around Logistics & E-commerce, Civil engineering, Construction Products & Services and Production technology. These should be considered as distinctive elements of the Doncaster economy. Some are well established, deeply rooted and significant in terms of employment. In addition, Doncaster's economy is also home to a Plastics & Vulcanised Products cluster, though this is not as significant in employment terms and should be considered as an opportunity for development rather than a highly established, deeply rooted cluster.

What is also very apparent is that, despite some high concentrations of employment in specific 'niche' activities, as demonstrated by the cluster evidence presented in this report, Doncaster's economy lacks critical mass and depth in the professional, business and supporting services sector in general. This is a weakness that should be considered a priority for action.

In terms of developing the Inclusive Growth Plan, as well as understanding economic specialisms, due consideration must also be given to 'framework conditions' for growth. These are the key elements which need to be considered and developed in order for inclusive growth impact to be maximised. Considering the specific conditions within Doncaster and the evidence provided to this study through consultations with Council staff and partners, the following are found to be the most critical framework conditions for consideration when developing a specialisms-led strategy:

- Supporting the local economy to create a larger number of high value jobs is seen as crucial to address local economic weaknesses and to drive inclusive growth that benefits all.
- Stimulating greater critical mass in the town centre in order to ensure viability and vibrancy (to support the retail, leisure, cultural and arts sectors, for example).
- Ensuring that wider economic development, growth and strategic opportunities are tapped into. This includes, for example, initiatives around the Five Foundations and four Grand Challenges of

the Industrial Strategy, city-region strategies and plans, supply chain development, maximising the opportunities arising from economic growth in neighbouring areas, and so on.

- Building a stronger service economy in Doncaster is crucial not only because of the direct benefits it brings (jobs and income for a wide range of jobs and skills levels) but also because it supports broader economic activity. This may be through services supplied to businesses in other sectors, such as logistics, engineering or manufacturing, or through creating local demand by virtue of the jobs it creates and salaries/profits it distributes. Improving the offer around office accommodation is seen as crucial to this.
- The digital and creative economy is increasingly seen as an essential part of a modern, growing economy. The proposed development by 360 Media at High Melton should be seen as a once-in-a-generation opportunity to kick-start this sector in the local economy. The spin-off benefits for the local area are very significant and exciting.
- The Council and partners need a long-term plan that will traverse political cycles, that delivers a sustainable vision and action plan and is backed up by a process that drives it forward. This must also articulate local ambition and drive to raise expectations of all in Doncaster and to make it happen.
- Building an educational offer which serves current needs but also fit for the future (i.e. a more highly skilled economy)
- Recognising that individual specialisms are themselves not mutually exclusive. This means that the plan must consider how to maximise mutually supportive opportunities which impact the widest possible section of the economy and society (e.g. through supply chain development, the creation of assets that are relevant to multiple specialisms within the economy, developing talent with transferable skills, and so on).

The established target for jobs growth in Doncaster is 1% per annum, which follows the target set by Sheffield City Region in its most recent Strategic Economic Plan. Achieving this target would create an additional 13,000 jobs over the plan period 2015-2032. This study puts forward the concept of economic Platforms for growth, which represents industrial specialisms within the Doncaster economy. Developing these Platforms should be seen as a strategic priority for Doncaster, in order to achieve the aspirational growth targets.

These Platforms represent cross-sectional strengths in the local economy identified through consideration of the related activities, niche products/services, skills, techniques, tools and business models that the Doncaster economy is founded on. This approach has a number of benefits, but chief amongst them is that the impact of initiatives can be maximised if they relate to Platforms rather than individual sectors or clusters.

This study finds that the key Platforms in the Doncaster economy are:

- Established Platform - Engineering & Technology
- Established Platform - Future Mobility (including Rail)
- Opportunity Platform - Advanced Materials
- Opportunity Platform - Creative & Digital

These Platforms not only capture the industrial specialisms present within the economy, but they also offer significant opportunities moving forward. Using scenarios analysis tied to other research that the Council has commissioned, the future potential of these Platforms can be estimated. In the aspirational scenarios, the study estimates that each platform could deliver the following by 2032:

- Engineering & Technology: an additional 3,800 jobs and £400m in GVA to 2032 with a productivity increase of 28%.
- Future Mobility: an additional 6,400 jobs and £440m in GVA with a productivity increase of 22%

- Advanced Materials: an additional 200 jobs and £80m in GVA with a productivity increase of 31%
- Creative & Digital: An additional 1,300 jobs (including High Melton) and £140m in GVA with a productivity increase of 20%. High Melton alone is estimated to be capable of delivering an additional 1,040 jobs into this sector and its supply chain.

This study is also recommending a focus on supporting services. Although it should not be considered a specialism in Doncaster, economic growth opportunities and outcomes will be maximised only if this sector is developed alongside the specialisms outlined above. The Supporting Services platform is a large employer in Doncaster (despite it not being a distinctive specialisms) which is projected to grow. And whilst productivity in Supporting Services is lower than the Doncaster average, it is projected to improve at a faster rate and therefore could add considerable value to the impacts targeted by the IGS.

It is important to recognise that the definitions of the platforms are not mutually exclusive. There is therefore a degree of double-counting in the analysis. If double-counting it excluded, the net impact of growth across the four specialisms (and based on the most ambitious, jobs-led scenario), would be:

- An increase in employment from around 22,300 in 2016 to 31,400 in 2032 (an increase 9,100 jobs, or 41%)
- An increase in GVA from around £1.08bn in 2016 to £1.88bn in 2032 (an increase of £0.8bn or 74%)
- An increase in average GVA per head from around £48,400 in 2016 to £59,800 in 2032 (an increase of £11,400 or 23%)

If double-counting is excluded from the analysis of Supporting Services and also based on the most ambitious scenario, the net effect would be:

- An increase in employment from around 12,500 in 2016 to 14,900 in 2032 (an increase of 3,400 jobs, or 19%)
- An increase in GVA from around £0.4bn in 2016 to £0.8bn in 2032 (an increase of £0.4bn, or 79%)
- An increase in average GVA per head from around £34,800 in 2016 to £52,000 in 2032 (an increase of £17,200, or 50%)

The aspirational (jobs-led) scenario for Doncaster presents significantly better outcomes compared to the baseline (or 'business as usual') scenario, and is therefore to be considered the optimum outcome to aim for. Achieving the outcomes described in the aspirational (jobs-led) scenario would lead to an additional 26,600 jobs created between 2015 and 2032 (1,560 per annum), almost double the number created in the baseline scenario (13,800 in total, or 800 jobs per annum).

Whilst the anticipated impact arising from High Melton Studios has been included in the figures presented above, this study has made no attempt to include other forthcoming projects and their impact. It is safe to say that there are other projects in the pipeline that will make important contributions to the achievement of the outcomes identified in this report, either within the four specialisms, support services or any other sector in Doncaster.

This study has demonstrated that adopting a dedicated approach to growth within specialisms is a key part of the strategy to achieve the most ambitious outcome for Doncaster, its economy and people.

5.2 Recommendations

In developing proposals for inclusive growth in Doncaster, the Local Authority has sought to maintain its innovative approach towards working in partnership with different civic stakeholders to build local capacity and capabilities. The premise of the DGT programme in assuming a holistic approach that covers learn, work, live and care is testament to this. However, while such an approach is admirable, it demands

an engaged and coordinated approach if it is to be effectively delivered. Accordingly, a series of recommendations are identified to ensure the programme of work delivers inclusive growth for Doncaster:

1. **Understanding and Evaluating Inclusive Growth:** While the ideological goal of outcome of inclusive growth might be the same, the practice of achieving inclusive growth is likely to be varied. Consequently strategies, policies and programmes to deliver inclusive growth are likely to be varied, therefore it is imperative that DMBC and the DGT team maintain an in-depth understanding of changing socio-economic dynamics. Moreover, there is also a need to ensure that the nature and impact of inclusive growth interventions are documented to evidence change occurring in Doncaster.
2. **Leading not Owning Inclusive Growth:** DMBC are an important and influential stakeholder in delivering inclusive growth, however, achieving inclusive is beyond the scope and remit of DMBC alone. As such DMBC needs to work with and within the framework conditions of the national government and the Local Enterprise Partnership as well as with other public and private civic stakeholders. A critical role of DMBC is convening the inclusive growth agenda, and co-creating the conditions for inclusive growth not delivering it.
3. **Internal Coordination and Road Mapping:** In addition to the need to coordinate across different stakeholders and spatial scales, there is an internal dimension to the challenge of coordinating across what are complex and interdependent policy domain. No single directorate owns inclusive growth, and if DMBC is to be effective in leading the wider DGT team there needs to be a clear consensus and sense of shared outcomes with overall accountability for the delivery of the DGT programme of work, as well as domain specific accountability i.e. learning, working, living and caring. This needs to remain a priority of DMBC and the wider DGT team, with an initial focus on 'road mapping' to set out the process by which the coordination will be achieved and the practical steps required.
4. **Making Inclusive Growth Distinctive:** The focus of the DGT programme with its focus on learning, working, living and caring in Doncaster highlights the domains through which inclusive growth will be delivered. The lenses of participation, productivity and prosperity, the 3Ps, help bring a much-needed focus to these domains in order to understand how activities relate to outcomes. In order to ensure that the benefits of inclusive growth are experienced Doncaster wide there is a need to proactively manage the activities and programmes delivered under the learning, working, living and caring domains, both individually and collectively, that advance the 3Ps.
5. **Distinguishing Priorities and Trade-Offs:** Given the budgetary and capacity constraints of DMBC, and the wider DGT team, in striving for inclusive growth there remains a need to make decisions about priorities and choices about trade-offs. Using the domains of the DGT work programme (learning, working, living and caring) provides the basis needed to inform and filter local decisions and trade-offs to support inclusive growth. Where possible DMBC needs to ensure that a more systematic process is implemented in order to embed the inclusive growth agenda and how it is applied to strategic and investment decisions.
6. **A People Centric Approach:** It is useful to remember that striving for growth and to increase productivity is ultimately about improving standards of living, and in the case of inclusive growth ensuring the benefits are experienced across society. One of the biggest challenges facing Doncaster is raising the ambitions and aspirations of local people about what the as individuals and Doncaster as a place can achieve. There remains a need for DMBC, and the wider DGT team, to ensure that they are actively engaged with and through different community groups to foster the cultural change necessary to ultimately deliver inclusive growth.

7. **Developing Critical Mass:** The industrial structure of the economy in Doncaster, like other areas, does not have the critical mass in traditional industrial sectors. The intention of the proposed platforms is to support specialisation through related variety, but this will only occur if industries are supported to work in this way. For Business Doncaster and other intermediaries and business support organisation the challenge is joining up the conventional silos with which businesses associate and the potential for businesses to benefit from being part of platforms for growth.
8. **Inclusive Focus of Inclusive Growth:** In order to deliver inclusive growth, the focus by definition needs to be inclusive. This means ensuring that all sections of society and businesses can participate and have the opportunity to become more prosperous. While this is not necessarily about affording support on a universal basis, it is about ensuring that the framework conditions do not overlook already marginalised groups. As such it is imperative that the offer of DMBC, the DGT team and the wider network of civic partners have something relevant and worthwhile for different economic and societal groups.
9. **Working on the supply-side and demand-side:** Historically Local Authorities have tended to adopt supply-side measures to increase productivity growth. However, DMBC and the DGT team also have an important role in creating an enabling environment for inclusive growth that fosters both economic competitiveness and community wide wellbeing. The policies and programmes of the DGT work programme (learning, working, living and caring) need to maintain an effective combination of both supply-side and demand-side measures with the sustained commitment of DMBC, if they are to be effective

6. Appendix I – Additional data tables

Table 10: Projected employment and GVA change in Engineering & Technology sectors (selected)

Sector	Employment				GVA (£m)			
	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led
Manufacture of plastic plates, sheets, tubes and profiles	1,200	800	800	1,300	£66.2	£62.4	£62.0	£93.8
Construction of roads and motorways	1,200	1,400	1,400	1,900	£106.0	£150.7	£149.7	£199.7
Repair and maintenance of transport equipment not elsewhere classified	1,000	700	700	1,000	£36.3	£34.2	£34.0	£50.3
Wholesale of other machinery and equipment	1,000	1,100	1,100	1,500	£46.4	£66.9	£66.4	£88.1
Construction of railways and underground railways	900	1,100	1,100	1,400	£80.1	£113.9	£113.1	£150.9
Freight rail transport	800	1,000	1,000	1,300	£30.1	£42.1	£41.8	£57.8
Manufacture of electric lighting equipment	600	500	500	1,000	£32.7	£33.3	£33.1	£66.8
Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers	500	700	700	1,000	£16.6	£27.9	£27.7	£42.0
Machining	300	200	200	300	£13.4	£12.1	£12.0	£18.2
Manufacture of metal structures and parts of structures	200	100	100	200	£8.9	£8.1	£8.0	£12.1
Manufacture of lifting and handling equipment	200	200	200	300	£10.9	£11.1	£11.0	£22.3
Manufacture of other parts and accessories for motor vehicles	200	300	300	400	£6.1	£10.3	£10.2	£15.5
Wholesale of other office machinery and equipment	200	200	200	200	£7.3	£10.6	£10.5	£13.9
Manufacture of refractory products	100	100	100	100	£4.4	£4.2	£4.1	£6.3
Manufacture of instruments and appliances for measuring, testing and navigation	100	100	100	100	£3.4	£4.4	£4.4	£4.4
Manufacture of other electronic and electric wires and cables	100	100	100	200	£5.4	£5.6	£5.5	£11.1
Manufacture of electric domestic appliances	100	0	0	100	£2.7	£2.8	£2.8	£5.6

Sector	Employment				GVA (£m)			
	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led
Manufacture of other general-purpose machinery not elsewhere classified	100	0	0	100	£2.7	£2.8	£2.8	£5.6
Manufacture of agricultural and forestry machinery	100	100	100	100	£3.8	£3.9	£3.9	£7.8
Manufacture of machinery for mining, quarrying and construction	100	100	100	100	£4.4	£4.4	£4.4	£8.9
Manufacture of motor vehicles	100	100	100	200	£3.5	£5.9	£5.8	£8.8
Repair of machinery	100	100	100	100	£4.6	£4.3	£4.3	£6.4
Repair of other equipment	100	100	100	100	£3.4	£3.2	£3.2	£4.8
Installation of industrial machinery and equipment	100	0	0	100	£2.3	£2.2	£2.1	£3.2
Wholesale of agricultural machinery, equipment and supplies	100	100	100	100	£2.9	£4.2	£4.2	£5.6
<i>Total</i>	<i>9,800</i>	<i>9,500</i>	<i>9,400</i>	<i>13,800</i>	<i>£525.4</i>	<i>£657.1</i>	<i>£652.6</i>	<i>£943.1</i>

Source: Ortus Economic Research. Smaller sectors in the platform are not shown. Figures may not sum to totals due to rounding.

Table 11: Projected employment and GVA change in Future Mobility sectors (selected)

Sector	Employment				GVA (£m)			
	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led
Warehousing and storage	3,600	4,200	4,200	5,800	£130.5	£182.4	£181.2	£250.6
Freight transport by road	3,300	3,900	3,800	5,300	£120.4	£168.4	£167.3	£231.3
Maintenance and repair of motor vehicles	1,100	1,100	1,100	1,100	£40.9	£56.3	£55.9	£57.7
Repair and maintenance of transport equipment not elsewhere classified	1,000	700	700	1,000	£36.3	£34.2	£34.0	£50.3
Construction of railways and underground railways	900	1,100	1,100	1,400	£80.1	£113.9	£113.1	£150.9
Service activities incidental to land transportation	900	1,100	1,100	1,500	£34.1	£47.7	£47.4	£65.5
Freight rail transport	800	1,000	1,000	1,300	£30.1	£42.1	£41.8	£57.8
Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers	500	700	700	1,000	£16.6	£27.9	£27.7	£42.0
Manufacture of lifting and handling equipment	200	200	200	300	£10.9	£11.1	£11.0	£22.3
Manufacture of motor vehicles	100	100	100	200	£3.5	£5.9	£5.8	£8.8
Renting and leasing of trucks	100	100	100	100	£1.4	£2.6	£2.6	£2.7
<i>Total</i>	<i>12,600</i>	<i>14,100</i>	<i>14,000</i>	<i>19,200</i>	<i>£509.9</i>	<i>£701.3</i>	<i>£696.5</i>	<i>£949.4</i>

Source: Ortus Economic Research. Smaller sectors in the platform are not shown. Figures may not sum to totals due to rounding.

Table 12: Projected employment and GVA change in Advanced Materials sectors (selected)

Sector	Employment				GVA (£m)			
	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led
Manufacture of plastic plates, sheets, tubes and profiles	1,200	800	800	1,300	£66.2	£62.4	£62.0	£93.8
Manufacture of builders' ware of plastic	500	400	400	600	£29.4	£27.7	£27.5	£41.7
Manufacture of hollow glass	400	300	300	500	£23.5	£22.2	£22.0	£33.4
Manufacture of wire products, chain and springs	400	300	300	400	£19.5	£17.7	£17.5	£26.5
Copper production	300	200	200	300	£16.7	£15.1	£15.0	£22.8
Wholesale of metals and metal ores	200	200	200	300	£9.3	£13.4	£13.3	£17.6
Manufacture of plastic packing goods	100	100	100	100	£5.9	£5.5	£5.5	£8.3
Manufacture of other plastic products	100	100	100	100	£5.9	£5.5	£5.5	£8.3
Manufacture of refractory products	100	100	100	100	£4.4	£4.2	£4.1	£6.3
Casting of steel	100	0	0	100	£2.8	£2.5	£2.5	£3.8
<i>Total</i>	<i>3,500</i>	<i>2,600</i>	<i>2,600</i>	<i>3,800</i>	<i>£190.2</i>	<i>£182.3</i>	<i>£181.0</i>	<i>£271.5</i>

Source: Ortus Economic Research. Smaller sectors in the platform are not shown. Figures may not sum to totals due to rounding.

Table 13: Projected employment and GVA change in Digital & Creative sectors (selected)

Sector	Employment				GVA (£m)			
	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led
Other telecommunications activities	800	800	800	800	£67.7	£96.3	£95.6	£96.5
Advertising agencies	400	500	500	500	£24.7	£40.9	£40.6	£41.0
Computer consultancy activities	300	300	300	300	£14.3	£20.6	£20.5	£20.7
Publishing of newspapers	100	100	100	100	£7.2	£9.1	£9.1	£9.2
Computer programming activities	100	100	100	100	£5.6	£8.1	£8.0	£8.1
Other information technology and computer service activities	100	100	100	100	£4.3	£6.3	£6.2	£6.3
Architectural activities	100	100	100	100	£4.3	£7.2	£7.1	£7.2
Specialised design activities	100	100	100	100	£4.9	£8.2	£8.1	£8.2
Library and archive activities	100	100	100	100	£2.3	£3.3	£3.3	£3.4
<i>Total</i>	<i>2,400</i>	<i>2,700</i>	<i>2,600</i>	<i>2,700</i>	<i>£164.7</i>	<i>£240.9</i>	<i>£239.3</i>	<i>£242.6</i>

Source: Ortus Economic Research. Smaller sectors in the platform are not shown. Figures may not sum to totals due to rounding.

Table 14: Projected employment and GVA change in Supporting Services sectors (selected)

Sector	Employment				GVA (£m)			
	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led	2016	2032 – Baseline	2032 – Aspirational	2032 – Job-led
Temporary employment agency activities	4,900	5,700	5,600	5,900	£128.0	£238.1	£236.5	£245.7
Other business support service activities not elsewhere classified	1,500	1,700	1,700	1,800	£39.1	£72.8	£72.3	£75.1
Engineering activities and related technical consultancy	900	1,100	1,000	1,100	£49.4	£81.8	£81.2	£82.0
Combined facilities support activities	900	1,100	1,100	1,100	£24.2	£45.0	£44.7	£46.4
Legal activities	700	800	800	800	£37.1	£61.3	£60.9	£61.5
Activities of employment placement agencies	700	800	800	800	£18.5	£34.4	£34.2	£35.5
Business and other management consultancy activities	600	700	700	700	£34.0	£56.2	£55.8	£56.4
Accounting, bookkeeping and auditing activities; tax consultancy	400	500	500	500	£23.2	£38.3	£38.1	£38.4
Advertising agencies	400	500	500	500	£24.7	£40.9	£40.6	£41.0
Combined office administrative service activities	400	500	500	500	£11.4	£21.2	£21.0	£21.8
Technical testing and analysis	300	300	300	300	£15.5	£25.6	£25.4	£25.6
Other professional, scientific and technical activities not elsewhere classified	300	400	400	400	£18.5	£30.7	£30.5	£30.7
Renting and leasing of construction and civil engineering machinery and equipment	300	400	400	400	£8.5	£15.9	£15.8	£16.4
Market research and public opinion polling	200	200	200	200	£9.3	£15.3	£15.2	£15.4
Renting and leasing of other machinery, equipment and tangible goods not elsewhere classified	100	200	200	200	£3.4	£6.4	£6.3	£6.6
Other building and industrial cleaning activities	100	100	100	100	£2.0	£3.7	£3.7	£3.8
Activities of trade unions	100	100	100	100	£10.6	£12.7	£12.6	£13.3
<i>Total</i>	<i>13,000</i>	<i>15,200</i>	<i>15,100</i>	<i>15,500</i>	<i>£461.4</i>	<i>£807.2</i>	<i>£801.7</i>	<i>£822.5</i>

Source: Ortus Economic Research. Smaller sectors in the platform are not shown. Figures may not sum to totals due to rounding.

7. Appendix 2 – Platform definitions

Figure 6: Outline Platform definition - Engineering & Technology

SIC 2007	SIC description
0910	Support activities for petroleum and natural gas extraction
0990	Support activities for other mining and quarrying
2221	Manufacture of plastic plates, sheets, tubes and profiles
2320	Manufacture of refractory products
2511	Manufacture of metal structures and parts of structures
2521	Manufacture of central heating radiators and boilers
2529	Manufacture of other tanks, reservoirs and containers of metal
2530	Manufacture of steam generators, except central heating hot water boilers
2540	Manufacture of weapons and ammunition
2562	Machining
2611	Manufacture of electronic components
2612	Manufacture of loaded electronic boards
2620	Manufacture of computers and peripheral equipment
2630	Manufacture of communication equipment
2640	Manufacture of consumer electronics
2651	Manufacture of instruments and appliances for measuring, testing and navigation
2660	Manufacture of irradiation, electromedical and electrotherapeutic equipment
2670	Manufacture of optical instruments and photographic equipment
2680	Manufacture of magnetic and optical media
2711	Manufacture of electric motors, generators and transformers
2712	Manufacture of electricity distribution and control apparatus
2720	Manufacture of batteries and accumulators
2731	Manufacture of fibre optic cables
2732	Manufacture of other electronic and electric wires and cables
2733	Manufacture of wiring devices
2740	Manufacture of electric lighting equipment
2751	Manufacture of electric domestic appliances
2790	Manufacture of other electrical equipment
2811	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
2812	Manufacture of fluid power equipment
2813	Manufacture of other pumps and compressors
2814	Manufacture of other taps and valves
2815	Manufacture of bearings, gears, gearing and driving elements
2822	Manufacture of lifting and handling equipment
2823	Manufacture of office machinery and equipment (except computers and peripheral equipment)
2824	Manufacture of power-driven hand tools
2825	Manufacture of non-domestic cooling and ventilation equipment
2829	Manufacture of other general-purpose machinery n.e.c.
2830	Manufacture of agricultural and forestry machinery
2841	Manufacture of metal forming machinery

SIC 2007	SIC description
2849	Manufacture of other machine tools
2891	Manufacture of machinery for metallurgy
2892	Manufacture of machinery for mining, quarrying and construction
2893	Manufacture of machinery for food, beverage and tobacco processing
2894	Manufacture of machinery for textile, apparel and leather production
2895	Manufacture of machinery for paper and paperboard production
2896	Manufacture of plastics and rubber machinery
2899	Manufacture of other special-purpose machinery n.e.c.
2910	Manufacture of motor vehicles
2920	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
2931	Manufacture of electrical and electronic equipment for motor vehicles
2932	Manufacture of other parts and accessories for motor vehicles
3011	Building of ships and floating structures
3012	Building of pleasure and sporting boats
3020	Manufacture of railway locomotives and rolling stock
3030	Manufacture of air and spacecraft and related machinery
3040	Manufacture of military fighting vehicles
3091	Manufacture of motorcycles
3092	Manufacture of bicycles and invalid carriages
3099	Manufacture of other transport equipment n.e.c.
3312	Repair of machinery
3313	Repair of electronic and optical equipment
3314	Repair of electrical equipment
3317	Repair and maintenance of transport equipment n.e.c.
3319	Repair of other equipment
3320	Installation of industrial machinery and equipment
3512	Transmission of electricity
4211	Construction of roads and motorways
4212	Construction of railways and underground railways
4313	Test drilling and boring
4614	Agents involved in the sale of machinery, industrial equipment, ships and aircraft
4651	Wholesale of computers, computer peripheral equipment and software
4652	Wholesale of electronic and telecommunications equipment and parts
4661	Wholesale of agricultural machinery, equipment and supplies
4662	Wholesale of machine tools
4663	Wholesale of mining, construction and civil engineering machinery
4666	Wholesale of other office machinery and equipment
4669	Wholesale of other machinery and equipment
4920	Freight rail transport
9511	Repair of computers and peripheral equipment
9512	Repair of communication equipment
9521	Repair of consumer electronics

Figure 7: Outline Platform definition - Future Mobility

SIC	SIC description
2822	Manufacture of lifting and handling equipment
2910	Manufacture of motor vehicles
2920	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
3317	Repair and maintenance of transport equipment n.e.c.
4212	Construction of railways and underground railways
4520	Maintenance and repair of motor vehicles
4920	Freight rail transport
4941	Freight transport by road
5020	Sea and coastal freight water transport
5040	Inland freight water transport
5121	Freight air transport
5210	Warehousing and storage
5221	Service activities incidental to land transportation
5224	Cargo handling
5229	Other transportation support activities
7712	Renting and leasing of trucks

Figure 8: Outline Platform definition - Advanced Materials

SIC	SIC description
2211	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
2219	Manufacture of other rubber products
2221	Manufacture of plastic plates, sheets, tubes and profiles
2222	Manufacture of plastic packing goods
2223	Manufacture of builders' ware of plastic
2229	Manufacture of other plastic products
2311	Manufacture of flat glass
2312	Shaping and processing of flat glass
2313	Manufacture of hollow glass
2314	Manufacture of glass fibres
2319	Manufacture and processing of other glass, including technical glassware
2320	Manufacture of refractory products
2441	Precious metals production
2442	Aluminium production
2443	Lead, zinc and tin production
2444	Copper production
2445	Other non-ferrous metal production
2451	Casting of iron
2452	Casting of steel
2453	Casting of light metals
2454	Casting of other non-ferrous metals
2593	Manufacture of wire products, chain and springs
4672	Wholesale of metals and metal ores

Figure 9: Outline Platform definition - Digital & Creative

SIC	SIC description
2611	Manufacture of electronic components
2612	Manufacture of loaded electronic boards
2620	Manufacture of computers and peripheral equipment
2630	Manufacture of communication equipment
2640	Manufacture of consumer electronics
2680	Manufacture of magnetic and optical media
3212	Manufacture of jewellery and related articles
4651	Wholesale of computers, computer peripheral equipment and software
4652	Wholesale of electronic and telecommunications equipment and parts
5811	Book publishing
5812	Publishing of directories and mailing lists
5813	Publishing of newspapers
5814	Publishing of journals and periodicals
5819	Other publishing activities
5821	Publishing of computer games
5829	Other software publishing
5911	Motion picture, video and television programme production activities
5912	Motion picture, video and television programme post-production activities
5913	Motion picture, video and television programme distribution activities
5914	Motion picture projection activities
5920	Sound recording and music publishing activities
6010	Radio broadcasting
6020	Television programming and broadcasting activities
6110	Wired telecommunications activities
6120	Wireless telecommunications activities
6130	Satellite telecommunications activities
6190	Other telecommunications activities
6201	Computer programming activities
6202	Computer consultancy activities
6203	Computer facilities management activities
6209	Other information technology and computer service activities
6311	Data processing, hosting and related activities
6312	Web portals
6391	News agency activities
6399	Other information service activities n.e.c.
7021	Public relations and communication activities
7111	Architectural activities
7311	Advertising agencies
7312	Media representation
7410	Specialised design activities
7420	Photographic activities

SIC	SIC description
7430	Translation and interpretation activities
8552	Cultural education
9001	Performing arts
9002	Support activities to performing arts
9003	Artistic creation
9004	Operation of arts facilities
9101	Library and archive activities
9102	Museum activities
9511	Repair of computers and peripheral equipment
9512	Repair of communication equipment

Supporting Services

SIC	SIC description
6910	Legal activities
6920	Accounting, bookkeeping and auditing activities; tax consultancy
7021	Public relations and communication activities
7022	Business and other management consultancy activities
7112	Engineering activities and related technical consultancy
7120	Technical testing and analysis
7311	Advertising agencies
7312	Media representation
7320	Market research and public opinion polling
7490	Other professional, scientific and technical activities n.e.c.
7731	Renting and leasing of agricultural machinery and equipment
7732	Renting and leasing of construction and civil engineering machinery and equipment
7733	Renting and leasing of office machinery and equipment (including computers)
7734	Renting and leasing of water transport equipment
7735	Renting and leasing of air transport equipment
7739	Renting and leasing of other machinery, equipment and tangible goods n.e.c.
7740	Leasing of intellectual property and similar products, except copyrighted works
7810	Activities of employment placement agencies
7820	Temporary employment agency activities
7830	Other human resources provision
8110	Combined facilities support activities
8122	Other building and industrial cleaning activities
8211	Combined office administrative service activities
8219	Photocopying, document preparation and other specialised office support activities
8299	Other business support service activities n.e.c.
9411	Activities of business and employers membership organisations
9412	Activities of professional membership organisations
9420	Activities of trade unions