

MIDLANDS ENGINE LEP PROFILES

Derby, Derbyshire, Nottingham, Nottinghamshire LEP (D2N2)

October 2019



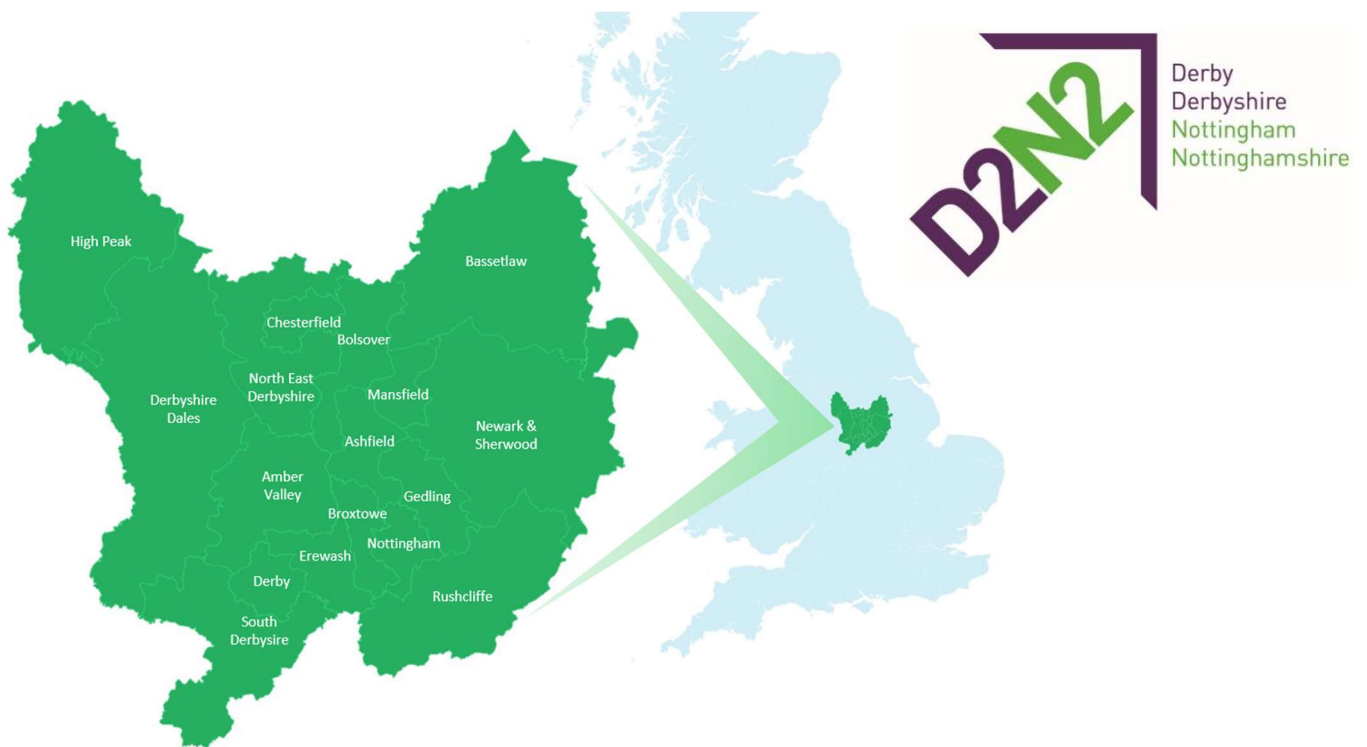
Introduction

This document profiles the Derby, Derbyshire, Nottingham, Nottinghamshire (D2N2) LEP area, providing insight and data across key areas of the economy, namely through the five foundations of productivity outlined in the government’s industrial strategy: Ideas, People, Infrastructure, Business Environment and Places. Benchmarking is provided in the context of the Midlands Engine, allowing comparison between D2N2 and other LEP areas within the region.

D2N2

D2N2 is home to more than 2 million people, making it the largest LEP area in the Midlands Engine in terms of population size. It is the third largest LEP area in the Midlands Engine in terms of physical size – covering 479,030 hectares. The economic geography of the area is polycentric with Derby and Nottingham as the largest cities. The LEP also includes a network of major towns including Retford, Worksop, Chesterfield, Mansfield, Newark-on-Trent, Ilkeston, Matlock, Ashbourne and Buxton.

D2N2’s vision is that “by 2030, D2N2 will have a transformed high-value economy; which is prosperous, healthy and inclusive, and one of the most productive in Europe” (D2N2 SEP Vision 2030). With the publication of the Vision 2030 SEP, D2N2 identified eight key sectors of business and industry: Transport Equipment Manufacturing, Food and Drink Manufacturing, Transport and Logistics, Low carbon, Life sciences, Visitor Economy, Construction, and Creative and Digital Industries.

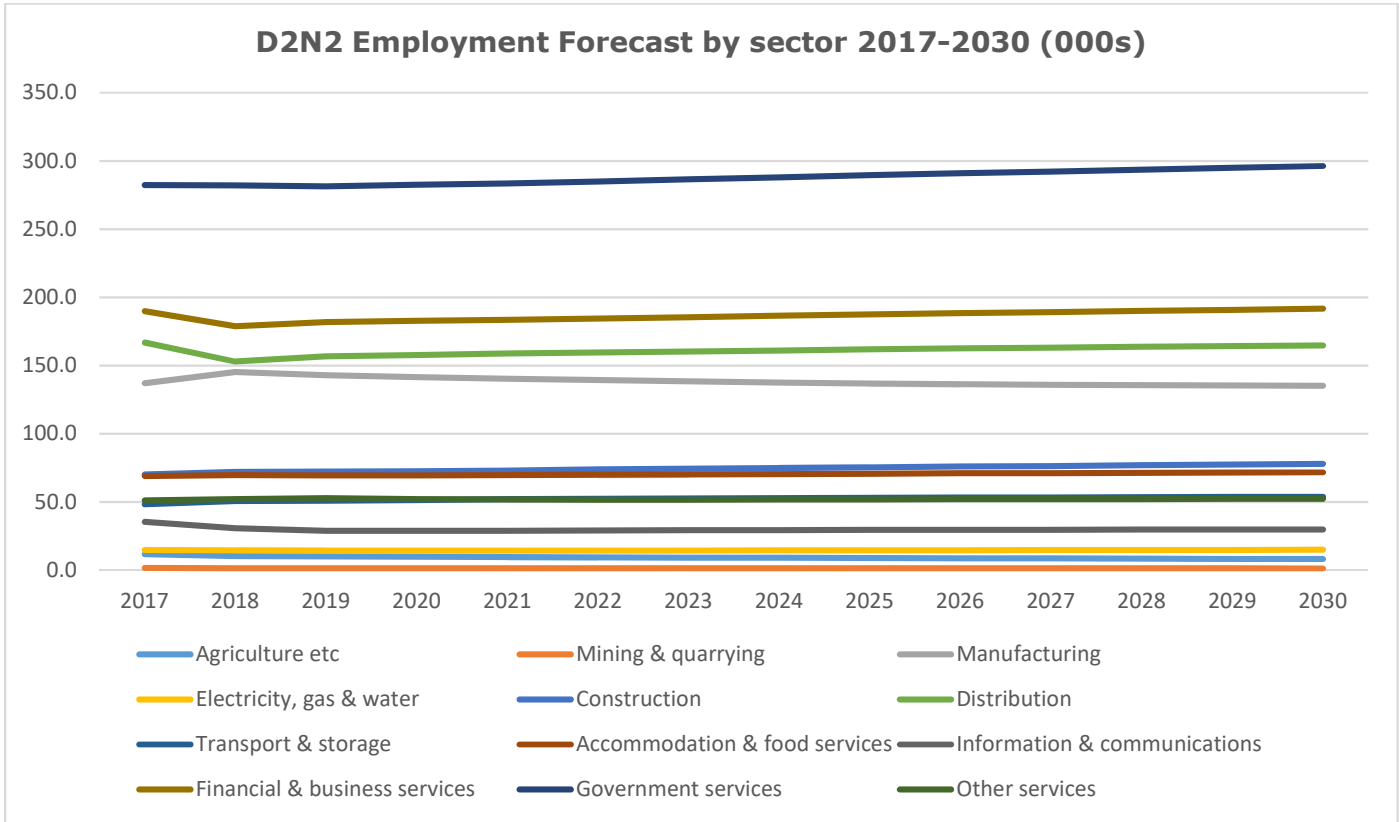


Contents

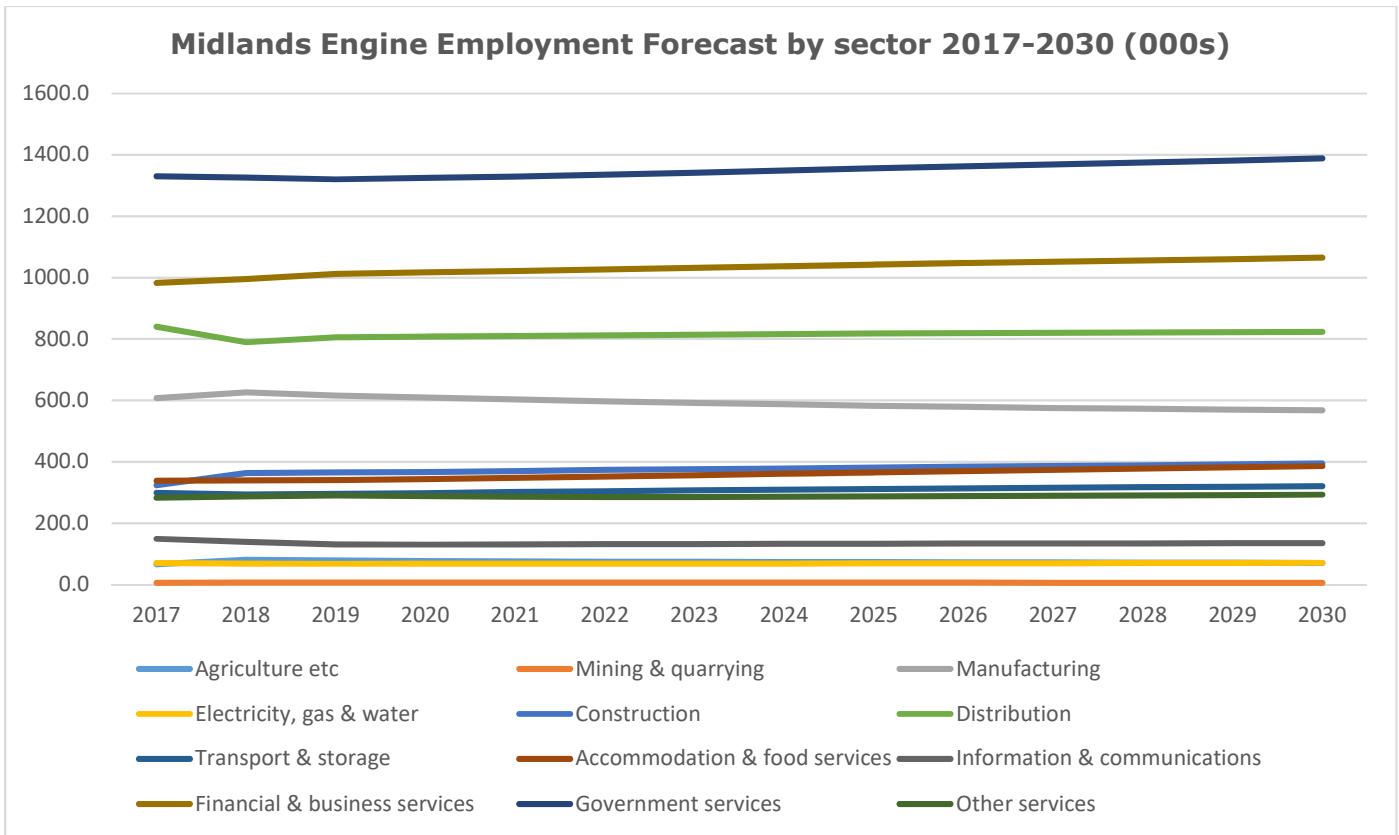
This LEP profile collates insight within the five foundations of productivity: Ideas, People, Infrastructure, Business Environment and Places. A section is provided for each of these which can be navigated by the contents table below. A summary of key statistics is presented first, before the full foundation sections begin. Data relating to D2N2 is highlighted in blue in each graph. Infographics at the start of each section present key statistics in the area. The statistics are contextualised in the graphs and text that follows.

D2N2 Key Statistics	3
Foundations of Productivity	4
Ideas	6
People	11
Infrastructure	16
Business Environment	21
Place	27

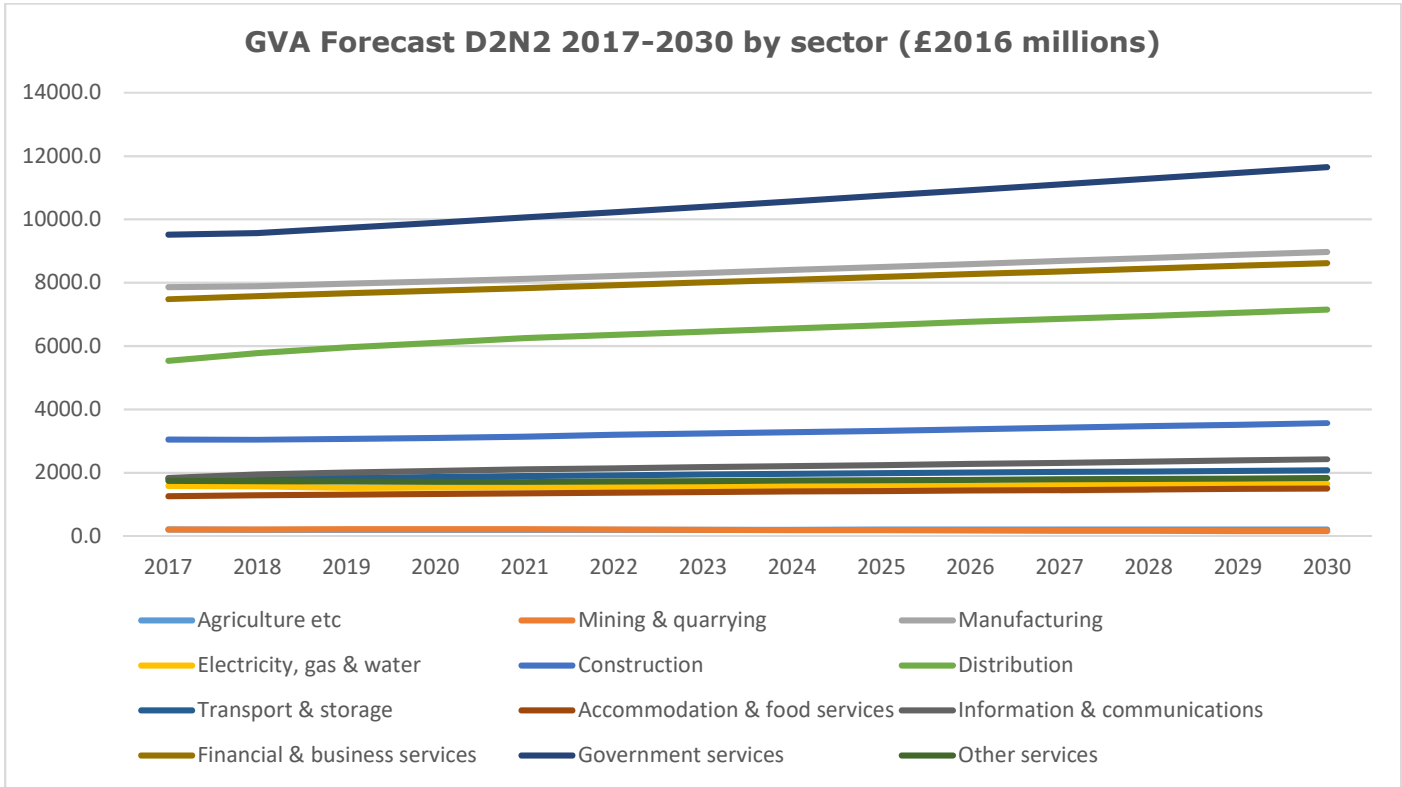




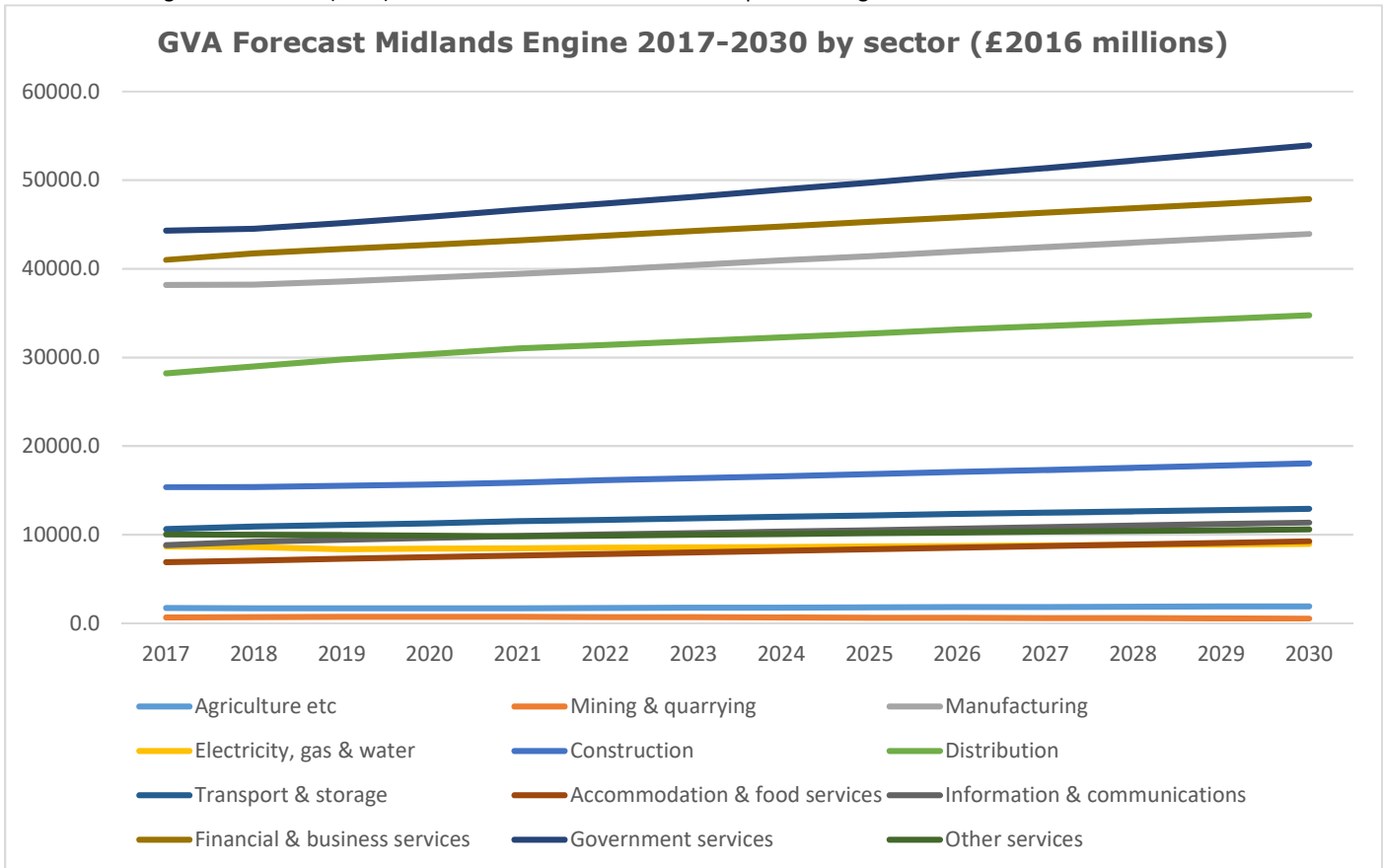
Source: Cambridge Econometrics (2019)



Source: Cambridge Econometrics (2019)



Source: Cambridge Econometrics (2019). Notes: Total GVA includes ownership of dwellings.



Source: Cambridge Econometrics (2019). Notes: Total GVA includes ownership of dwellings.

 **IDEAS**



**3
UNIVERSITIES**



**35,221,676€
SECURED
THROUGH
HORIZON 2020**



**£606,622,880
SECURED
THROUGH
RESEARCH
COUNCILS/
INNOVATE UK**



**£3107/FTE
BUSINESS
ENTERPRISE
SPENDING ON
R&D**

The UK’s Industrial Strategy stresses the importance of the UK being a global leader in science and research. Key policies include:

- a target to raise total R&D investment to 2.4% of GDP by 2027
- increasing the R&D tax credit rate to 12%
- the creation of the £725 million Industrial Strategy Challenge Fund.

Figures 1-4 provide an indication of the assets that D2N2 has and the challenges it faces in relation to the Ideas Foundation. Business Enterprise Spending on R&D is a key strength. The area is second only to Coventry and Warwickshire in Midlands Engine area – albeit that there is some concerns that this is concentrated in a small number of large firms. The area is also the third strongest LEP in the Midlands Engine in terms of capture of Horizon 2020 grants – reflecting the presence of a Russell Group university in University of Nottingham. Brexit represents a significant challenge to future research funding and collaboration between business and universities as well as business support in the sub-region in view of the loss of ERDF funding.

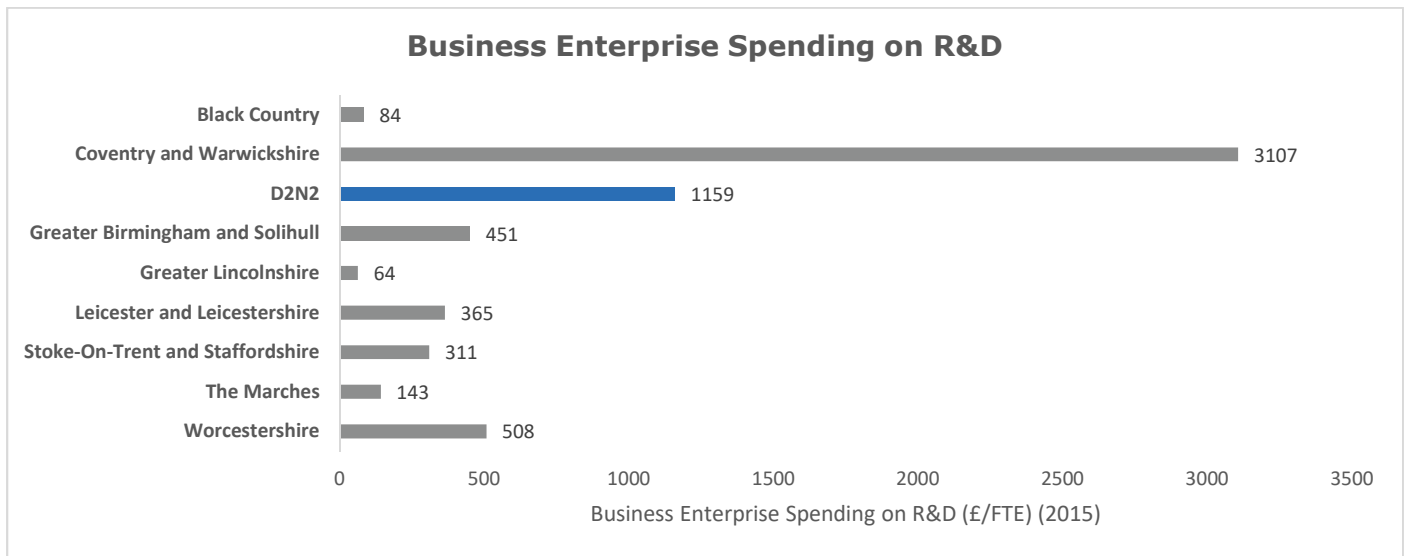


Figure 1 Source: BERD data analysis, Smart Specialisation Hub

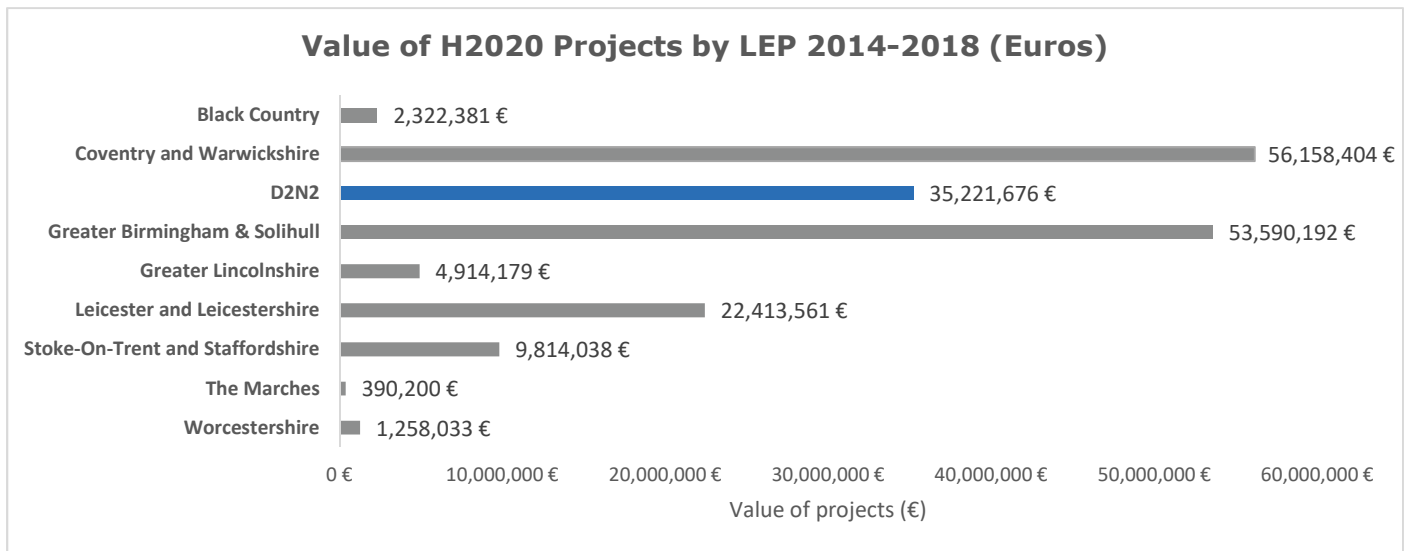


Figure 2 Source: EU Open Data Portal (2018)

Value of research council/ UKRI awards 2012-2021

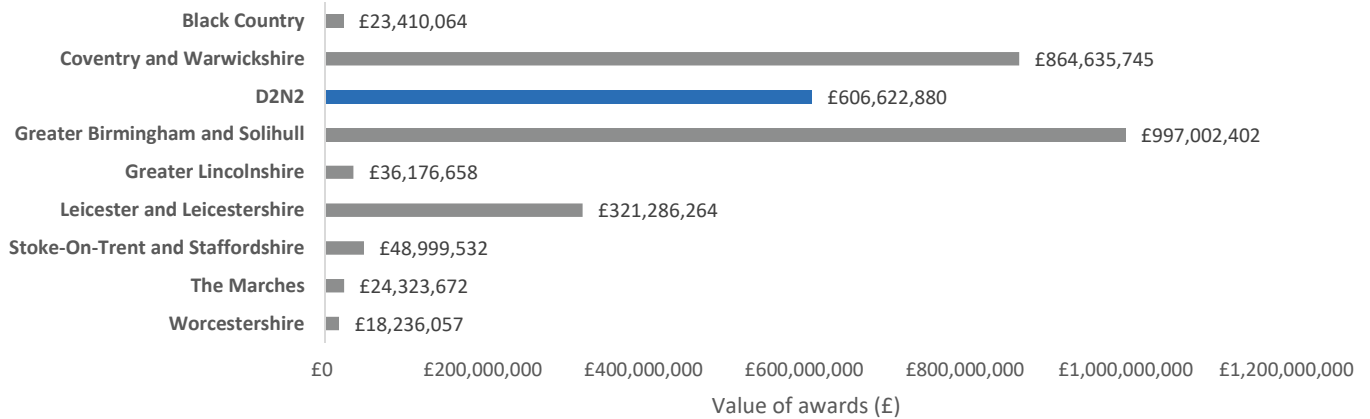


Figure 3 Source: UKRI (2019)



Innovation Benchmarks: 2014-16

■ Highest ■ Lowest □ Derby, Derbyshire, Nottingham and Nottinghamshire

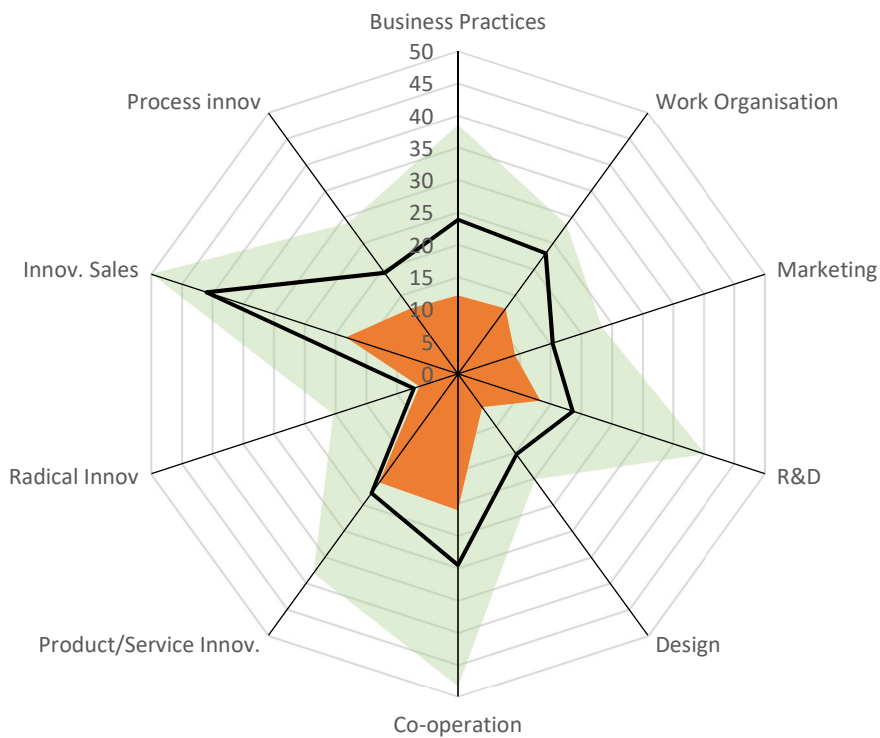


Figure 4 Source: Roper and Bonner (2019)

Charts are derived from the UK Innovation Survey. Details of derivation of data can be found in the [ERC Innovation Benchmarks Report](#). Charts relate to a series of 10 metrics which provide an indication of the proportion of firms in each area engaged in each type of innovation.

Assets

According to Figure 1, in 2015, at £1,159 per full-time employee, D2N2 has the second highest business spending on R&D in the Midlands Engine. This shows that businesses are confident in investing money

into ongoing research within the area. A network of advanced engineering firms linked to transport exists centred on Derby – supported by a unique ecosystem of specialist technical and support services.

As shown in Figure 2, between 2014 and 2018, the D2N2 LEP area also secured the third highest value of H2020 projects within the Midlands Engine at 35,221,676€. This reflects the existence of three universities with complementary research and teaching foci and in particular the presence of the University of Nottingham, which is part of the Russell group of leading research universities in the UK.

Other important assets for research and development in the area include [BioCity Nottingham](#), the UK's largest life-science themed business incubation and grow-on facility. State-of-the-art lab equipment such as NMR, mass spec, rotary evaporators and centrifuges are available to rent by the hour. There is also the [Enterprise Zone](#), which focuses on healthcare/medical technology and is aiming to become the UK's centre for innovation in life sciences, medical research, health, beauty and wellness.

Figure 4 shows that D2N2 LEP area has particular strengths in design investment for investment and new methods of work organisation. Roper and Bonner (2019) rank the area 7th of the 39 English LEP areas and 2nd among the Midlands Engine LEP areas for the percentage of firms undertaking design investment for innovation¹, and 9th among English LEP areas and 4th among Midlands Engine LEP areas for the proportion of firms reporting the implementation of new forms of work organisation. This is important as "more fluid, risk-tolerant" ways of working can foster creative thinking and in turn, innovation.

Barriers and potential challenges

Brexit represents a significant challenge to the future of research funding in the sub-region given that the UK is unlikely to be eligible for EU research and development funding such as Horizon 2020. ERDF funding supports collaboration between businesses and universities and business support focused on innovation (e.g £10.1 Enabling Innovation programme delivered by D2N2's universities).

Whilst the area is home to global brands such as Rolls Royce, Bombardier, Toyota, Boots, and Experian and Capital One, there is also some evidence that business and enterprise spending on innovation is concentrated in a relatively small number of large companies, which presents particular risks in terms of the sustainability of economic growth.

Figure 4 suggests that D2N2 faces barriers in terms of the proportion of firms undertaking product or service innovation (ranked 30th among LEP areas in England and 10th among Midlands Engine LEP areas), the percentage of firms undertaking R&D (ranked 30th among LEP areas in England and 8th among Midlands Engine LEP areas).

Opportunities

Opportunities exist to build on the notable concentration of life-science linked activity particularly in and around Nottingham.

Rail related technical expertise centred on Derby is also likely to play a key role in the delivery of HS2.

The combination of business services, finance and big data expertise centred on Nottingham is of note in relation to the growing Fintech sector.

¹ Based on Midlands Engine 11 LEP geography.

Institute for Advanced Manufacturing case study

- Project Lead – University of Nottingham.
- £5m investment from D2N2 LEP in to a £24m facility.
- Facility aims to provide world leading facilities to encourage the development of new technologies and production systems for high value manufacturing.
- Key strategic UK industrial sectors including aerospace and defence, automotive, consumer, food, healthcare and energy.
- Addressing the UK industrial skills agenda by delivering world-class undergraduate and postgraduate programmes in manufacturing and engineering, supplemented by a range of continuous professional development.

Going Forward

- D2N2 LEP will support long term productivity improvement through innovation-led growth
- The LEP aspires to build on the evidence provided by the D2N2 Science and Innovation Audit. Around one in five jobs are in 'science and technology' sectors, supported by 'anchor' corporates and in the impressive, and growing, network of innovation centres and incubation facilities across the area.
- More businesses need to adopt and adapt to innovation or be over-whelmed by it
- The LEP recognises that it needs to increase the proportion of businesses that are 'innovation active'; enabling businesses to implement process or 'new to the firm' innovations will continue to be as important as the development of new products. This includes adopting new management practices and new methods of work organisation. Enabling businesses to exploit the opportunities from digitalisation will be a key component
- The LEP considers that its specialist expertise fits well with the Grand Challenges identified in the Industrial Strategy
- D2N2 LEP has also identified the opportunity to maximise benefit from the Midlands Engine Transport Innovation, Medical Technologies and Future Food Processing Accelerators; and from plans to establish a Nuclear Advanced Manufacturing Research Centre as part of the Derby Science and Innovation Campus based on Infinity Park, and a new Medical Technologies Innovation facility in Nottingham.



Jubilee Campus, University of Nottingham, Nottingham

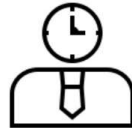
 **PEOPLE**



28.4%
**RESIDENTS STAY
FOR STUDY &
EMPLOYMENT**



£28,207
**AVERAGE
EARNINGS**



**930,000
JOBS**



73.6%
EMPLOYMENT



4.6%
UNEMPLOYMENT



33.8%
**NVQ4 AND
ABOVE (16-64)**

Within the UK’s Industrial Strategy, the People Foundation aims to generate good jobs and greater earning power for all. It focuses on improving skills levels, particularly in science, technology, engineering and maths; narrowing disparities between communities in skills and education and removing barriers faced by workers from underrepresented groups in the labour market.

Figures 5 to 9 provide an overview of the skills level, average earnings, employment rate and unemployment rate in D2N2.

D2N2 benefits from a middling employment rate as well as relatively low unemployment compared to Midlands Engine benchmarks. The area has the third highest average earnings when compared to other Midlands Engine LEPs. A growing proportion of the workforce has NVQ4+ qualifications, the proportion of graduates staying for study and employment is significantly higher than the Midlands Engine average and the area performs well in terms of apprenticeship starts. Nonetheless, D2N2 LEP area faces issues with qualification levels among some residents. Recent initiatives seek to address skills challenges stemming from the pace of technology development.

Qualifications Level (2018)

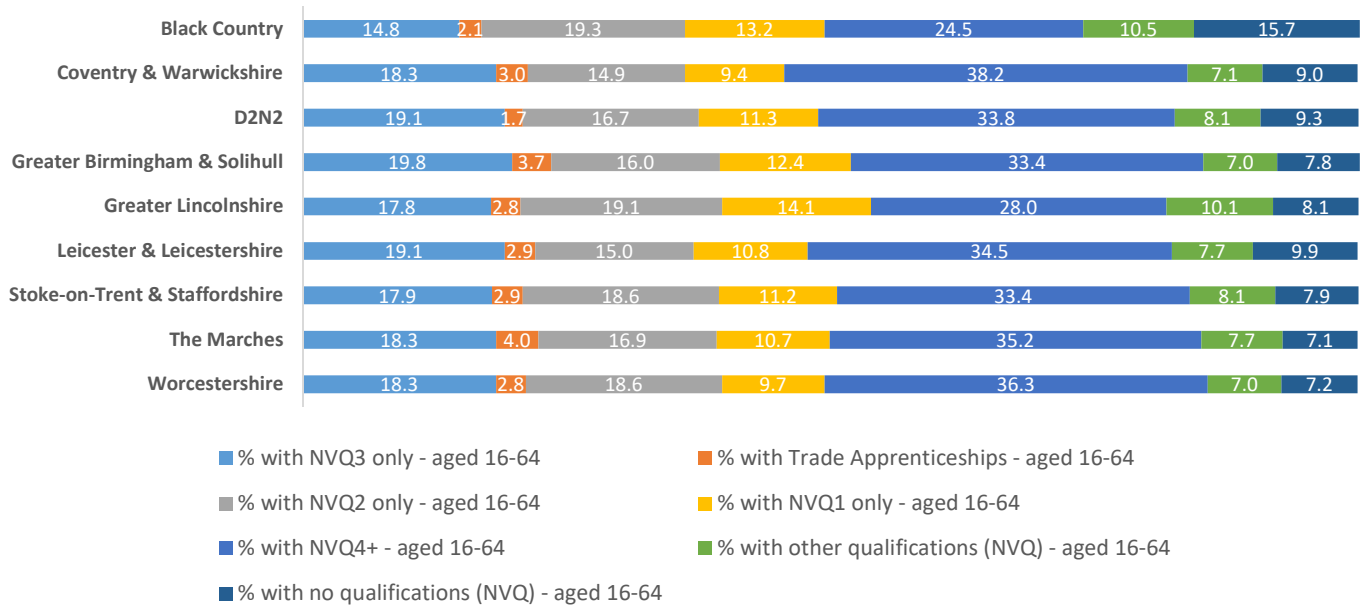


Figure 5 Source: ONS, Annual Population Survey (2019)

Apprentice Starts 2016-2018

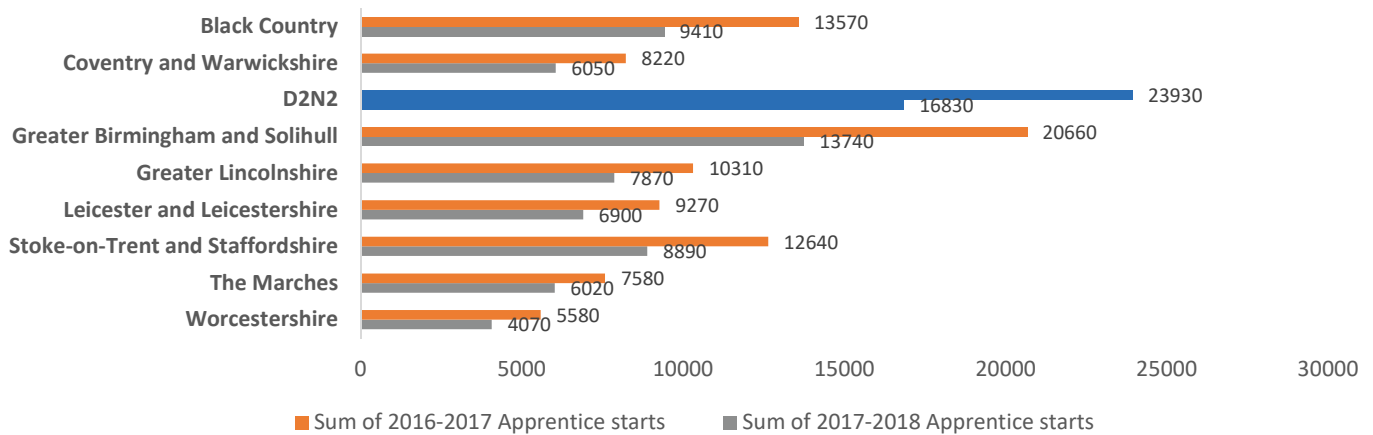


Figure 6 Source: Department for Education (2018)

Graduate Retention (2018)

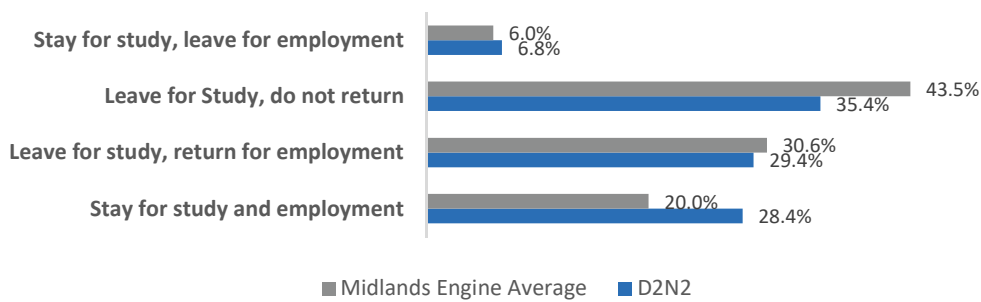


Figure 7 Source: Higher Education Statistics Agency (2018), Destinations of leavers from Higher Education, 2018

Employment and Unemployment Rates

LEP	Employment Rate of Working Age Population (%)	Unemployment Rate of Working Age Population (%)
Black Country	68.7	6.1
Coventry and Warwickshire	77.0	3.3
D2N2	73.6	4.6
Greater Birmingham and Solihull	71.0	6.0
Greater Lincolnshire	74.5	5.3
Leicester and Leicestershire	73.4	5.0
Stoke-on-Trent and Staffordshire	76.4	4.0
The Marches	79.4	3.1
Worcestershire	79.4	3.3
Midlands Engine (LEP)	73.9	4.8

Figure 8 Source: ONS Annual Population Survey (2019)

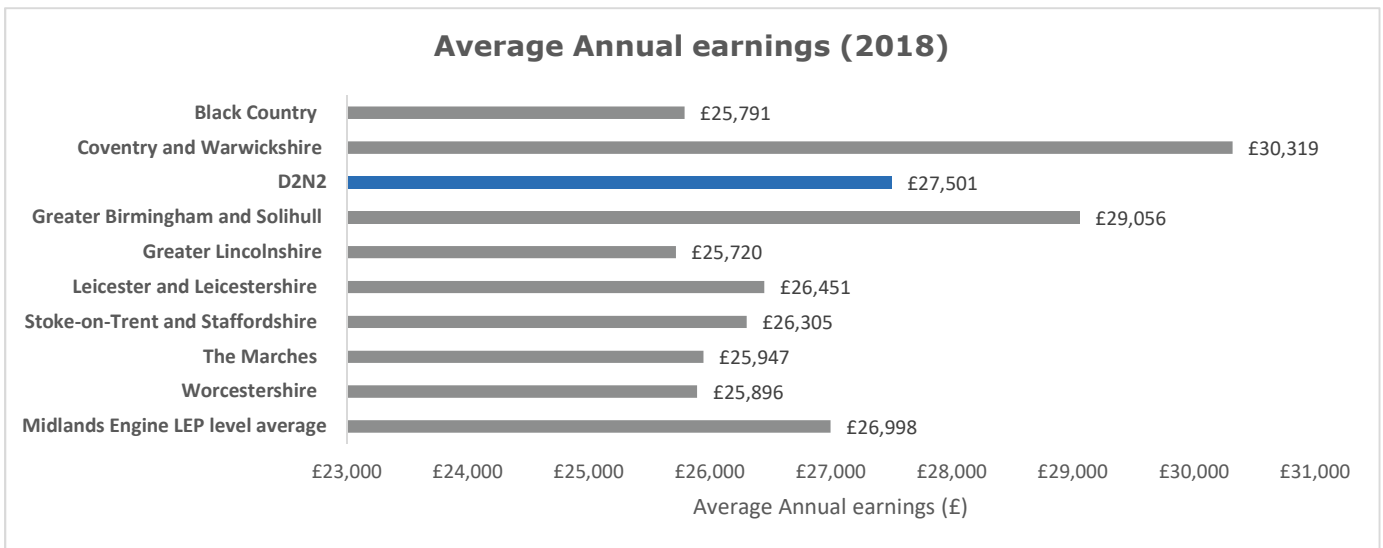


Figure 9 Source: ONS, Annual Survey of Hours and Earnings - Workplace Analysis (2018). N.B. data is provisional.

Assets

As shown in Figure 9 an asset in D2N2 is that the area has the third highest average earnings across the Midlands Engine region at £27,501. D2N2 also performs well in terms of graduate recruitment. It has a significantly higher proportion of graduates staying for study and employment compared to the Midlands Engine average.

Figure 6 indicates that D2N2 performs strongly on apprenticeship starts compared to other Midlands Engine LEPs. The area had the highest number of apprentice starts of any LEP in the region in 2017 with 16,830 people beginning apprenticeships in the area that year. However, when the size of the population of D2N2 LEP area is taken into account, the area has only the 6th highest number of apprenticeships.

D2N2’s Growth Hub plays an important role in ensuring better business engagement with the knowledge and assets in the area’s higher and further education institutions and in supporting the take up of apprenticeships (particularly at higher and graduate levels). It also helps to enhance leadership and

management skills among local workers as well as to support local workers to adapt to digitisation in the workplace. It provides a single point of contact for employers regarding employment and skills information and support.

Barriers and Challenges

Whilst D2N2 benefits from notable assets in terms of its population, the area nonetheless faces several challenges. As shown in Figure 5, it is the second highest LEP in terms of proportion of workforce with no or low qualifications. 9.3% of residents have no qualifications compared to only 7.1% in The Marches.

Also, although D2N2 has a high proportion of graduates who stay for study and employment, a higher proportion of graduates stay for study then leave for employment elsewhere than the Midlands Engine average. This indicates that graduates may not perceive the area as offering significant options for career progression.

[Disparities in earnings levels](#) can also be identified across the area. Whereas Derby is one of the highest average wage economies in England - having an average gross disposable household income of approximately £500 per week – average gross disposable household income is much lower elsewhere, falling to around £300 per week in Mansfield for example. 29% of the working age population earn below the national living wage. The sector and occupation mix in D2N2 leaves the area significantly exposed to the risk of automation, which is most prevalent in areas where wages and skills are already low.

Opportunities

The comparatively strong performance on apprenticeship starts may reflect D2N2's strength in manufacturing. The opening of a £24 million [Advanced Manufacturing Building](#) at the University of Nottingham in 2018 offers opportunities to continue this strength through developing digital manufacturing in the area. The centre will address skills challenges stemming from the pace of technology development, an ageing workforce and a shortage of graduates with multidisciplinary skills and experience relevant to the needs of manufacturing businesses. It will help leading manufacturers to deliver world-class research and transfer the knowledge created into high-impact industrial technologies.

Nottingham College is now the 5th largest FE provider in the country. The establishment of Nottingham College's £58 million [Nottingham City Hub](#) also provides opportunities to address the skills deficit in the area. The City Hub campus development is due to be completed in 2020 and emphasises skills development. The Hub is designed to be an inviting and accessible learning environment which will actively encourage local businesses and the wider community into the building.

Chesterfield HLS Centre case study

- Project Lead – University of Derby.
- £3.48m LEP investment contribution to a £7.69m facility.
- This project was developed to offer Higher Level Skills provision to Chesterfield in Derbyshire, the area was a cold spot for Higher Education Provision and this new facility will offer courses in University Level provision to the town.
- The facility includes space for learners to take part in real life style training in nursing and healthcare professions, and also offers state of the art equipment including mock wards and interactive training facilities.

Going Forward

- D2N2 aims to address existing skills mismatch and rapid shift in future skills needs through focusing on all age careers support.
- It will highlight local labour market opportunities and promote lifelong learning.
- The LEP will focus on progression pathways and social mobility by addressing barriers to employment.
- Focus will be placed on addressing the recruitment shortages as a result of a squeezed labour market.
- Bringing employer engagement into the heart of the skills system to drive a more dynamic and responsive system will be prioritised.
- Accelerating adoption of higher and technical skills to enable innovation and productivity including graduate placement and retention, and supporting sector focused innovation needs will also be a key strategic aim.



Chesterfield HLS Centre, Derbyshire

 **INFRASTRUCTURE**



**971,790
DWELLINGS**



**1
INTERNATIONAL
AIRPORT**



**6.08
HOUSE PRICE
TO INCOME
RATIO**



**41.4%
SUPERFAST
BROADBAND**

The Industrial Strategy recognises that having modern and accessible infrastructure throughout the UK is essential to future growth and prosperity. It stresses the importance of large scale, long-term investment in transport, housing and digital networks for long-term productivity, through increasing the earning power of Britain’s people, communities and businesses.

The strategy aims to improve access to full-fibre broadband, develop new 5G networks, improve the usage of 5G technologies, create a new high-speed rail network better connecting residents to jobs, regenerate stations and airports, upgrade the road network and improve individual’s lives through better quality housing and the promotion of clean, affordable energy.

Figures 10-12 provide an indication of assets and challenges that the D2N2 area faces in terms of infrastructure. Key assets include the large dwelling stock, the presence of East Midlands Airport and the nation’s largest freight dedicated airport and relatively good housing affordability compared to other LEP areas. Challenges include slow and infrequent East-West rail connectivity between Nottingham-Birmingham, and the lack of surface rail links to East Midlands Airport. Important opportunities to support growth and development exist in relation to the planned HS2 rail hub at Toton, further development of SEGRO East Midlands Gateway Logistics Park, extending the NET (tram) to Derby and expanding the Enterprise Zone.

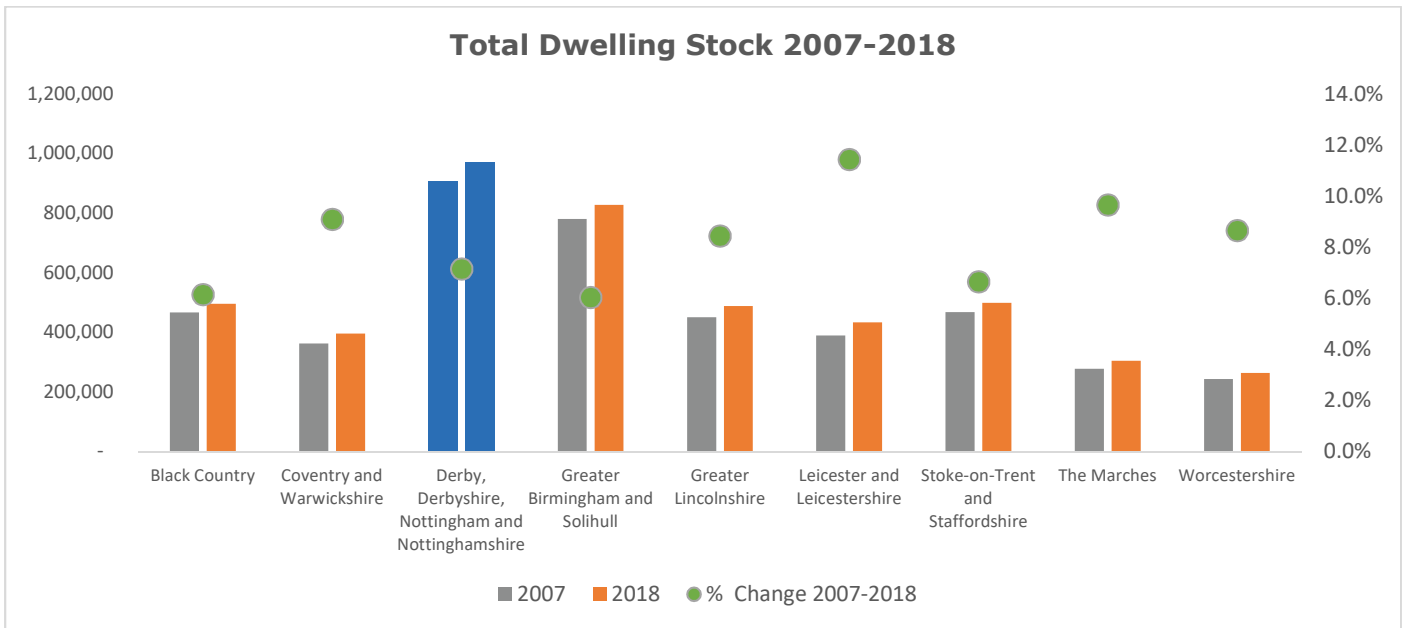


Figure 10 Source: Ministry of Housing, Communities & Local Government, Live Table, 125 (2018)

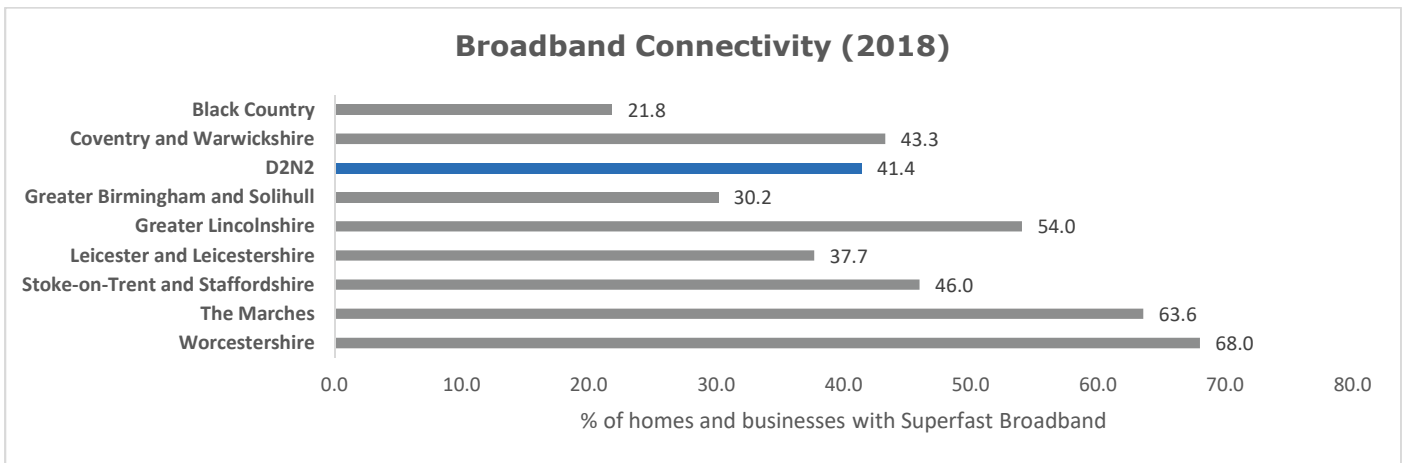


Figure 11 Source: OFCOM, Connected Nations (2018)

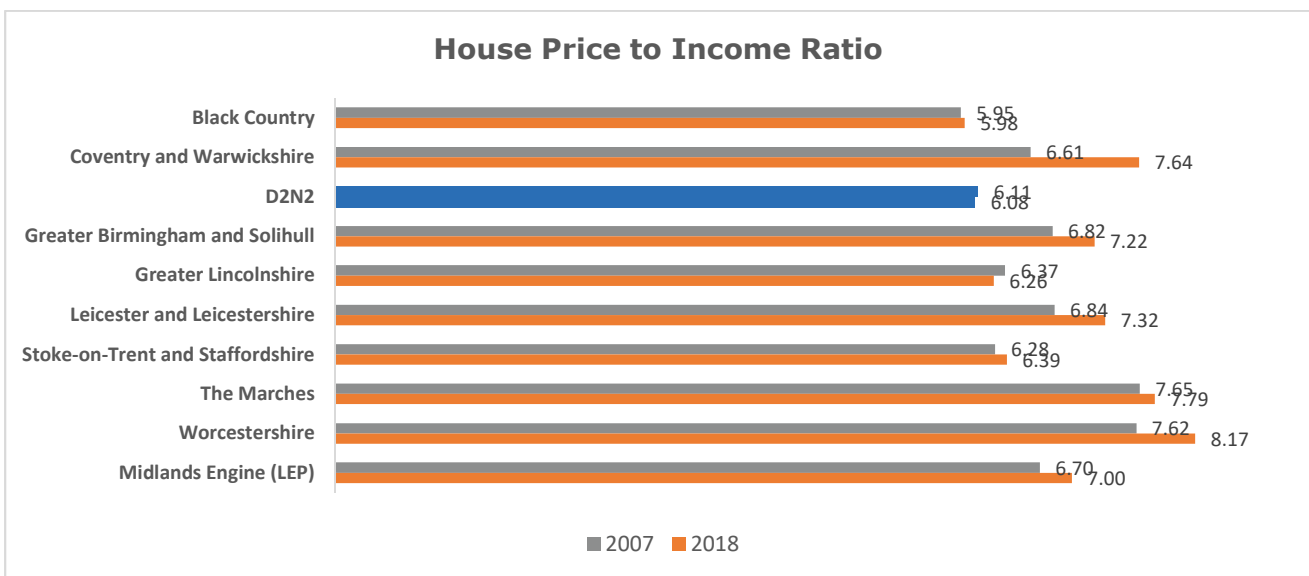


Figure 12 Source: ONS House price to residence-based earnings ratio (2019)

Assets

An asset that D2N2 LEP can utilise is that it has the largest dwelling stock in the Midlands Engine. Figure 10 demonstrates how dwelling stock increased between 2007 and 2018. An important benefit of increased dwelling stock is that it attracts homeowners into the area, which in turn widens the workforce pool. It also creates greater demand for goods and services within the area, further boosting economic activity between consumers and businesses within the LEP. This is greatly supported by other important infrastructure such as the central location of the LEP area in national and regional transport networks and East Midlands Airport, the nation's largest freight dedicated airport.

D2N2 is also home to the SEGRO East Midlands Gateway Logistics Park, a 700-acre site. The development incorporates a 50-acre Strategic Rail Freight Interchange (SRFI) that will include a rail freight terminal, capable of handling up to sixteen 775m freight trains per day, container storage and HGV parking. The park is located at a strategically significant location with direct access to the M1, which in turn provides access to the whole of the UK. It is also adjacent to the A50 and A453 trunk roads and only 1.5 miles from the A42/M42 connection at J23A.

Figure 12 shows that the D2N2 area has relatively good housing affordability compared to other LEP areas in the Midlands Engine.

Growth and prosperity within D2N2 are also supported by Nottingham and Derby Enterprise Zone. There are currently three Enterprise Zone sites in Nottingham and one in Derby. The sites are comprised of:

- the Alliance Boots site in Nottingham which aims to create a UK centre for innovation in health, beauty and wellness,
- the Beeston Business Park which is centred on technology and ICT for the future
- the award winning Nottingham Science Park. Located opposite the University of Nottingham, the science park provides important research and development support for companies and is located directly connected to the tram to the city centre and transport hub of Nottingham.
- The Infinity Park in Derby a £200m, 250-acre commercial and technology park located in the South of Derby alongside the A50. This includes [the Nuclear Advanced Manufacturing Research Centre Midlands](#) which opened in 2019 and is a new research and innovation centre to support manufacturers across the region.

Barriers and Challenges

Several barriers and challenges hinder productivity within the D2N2 LEP area. Figure 11 illustrates that D2N2 only has modest superfast broadband coverage in homes and businesses, which in the fourth industrial revolution is likely to slow down business operations.

There are also issues with slow and infrequent East-West rail connectivity between Nottingham-Birmingham. Additionally, the lack of surface rail links to East Midlands Airport remains a concern, both from economic and sustainability perspectives. Furthermore, there has been a failure to fully electrify the Midland Mainline to Nottingham. This project had great potential to reduce journey times to London.

Figure 10 indicates that whilst the D2N2 LEP area has the largest dwelling stock in the Midlands Engine, the size of the dwelling stock increased by only 7.2% - the fourth smallest increase over the period in the Midlands Engine LEP areas.

The D2N2 LEP is currently undergoing large infrastructure change in order to improve the current status in which it is operating. However, the presence of major transport infrastructure (both current and planned), presents challenges in terms of management of negative externalities (such as traffic, road closures and rail closures) and environmental arisings of various kinds. All of these have the potential for negative impacts on the D2N2 economy if not managed successfully.

Opportunities

Further important opportunities to support growth and development in D2N2 are linked to the planned HS2 rail hub at Toton and further development of SEGRO East Midlands Gateway Logistics Park. The development has planning consent for up to 6,000,000 sq ft of logistics accommodation. [D2N2's Vision 2030](#) emphasises the importance of expanding connectivity and supply chains and improving residents' skills levels. D2N2 LEP has partnered with other LEPs and partners across the East Midlands, to develop a shared [East Midlands Growth Strategy for HS2](#). This strategy identifies two regional 'HS2 growth zones' within the D2N2 area. A collaborative, partnership approach will be adopted in each area to realise the economic benefits of HS2 for the D2N2 LEP area within a wider approach to maximising connectivity, business and skills benefits.

The Derby/Nottingham Metro Strategy has highlighted the potential of extending the NET (tram) to Derby.

There is also significant potential to expand the existing Enterprise Zone to further support the development of the Nottingham life-sciences cluster and transport related advanced manufacturing in Derby.

Seymour Link Road case study

- Project Lead – Derbyshire County Council.
- £2.52m of funding from D2N2 to a £7.56m total project cost.
- Markham Vale is a strategic employment site of national importance, located adjacent to Junction 29A of the M1 motorway. D2N2 has invested in the creation of a new access road which will unlock 81 Acres of developable employment land on the site.
- Once completed the project will deliver over 1,200 jobs to the local economy and has to date delivered over 600 jobs to date.
- This project was completed in strategic partnership with Sheffield City Region.

Going Forward

- D2N2 aims to support and promote the economic benefits of HS2 for the area.
- The LEP also aspires to roll out the development of the D2N2 Enterprise Zones, generating income for re-investment against their economic priorities.
- Another area of focus will be supporting the development of East Midlands Airport as the area's primary gateway to the world, and maximising opportunities for inward investment
- There are also plans to work with Midlands Connect to realise the benefits of better rail connectivity through the Midlands Rail Hub.
- Promoting the opportunities for greater inter-connectivity across the sub-region is also important.
- D2N2 will also focus on maximising opportunities for greater broadband connectivity especially across rural areas.



Seymour Link Road, Derbyshire



BUSINESS ENVIRONMENT



**78,460
BUSINESSES**



**8,895
BUSINESS BIRTHS**



**-8.0%
BUSINESS BIRTHS**



**7.5% OF JOBS IN
BUSINESS
ADMINISTRATION
& SUPPORT
SERVICES**



**6.2% OF JOBS
IN PROFESSIONAL,
SCIENTIFIC &
TECHNICAL
SECTOR**

The Business Environment Foundation of the Industrial Strategy aims to support the UK to be the best place to start and grow a business. The key challenge identified in the strategy is how to ensure all businesses adopt best practice from the UK's most productive businesses. It aims to address how, on average, managers in the UK are less proficient than managers are in other competitor countries. Overall, the strategy aims to drive productivity in all businesses regardless of size through increasing collaboration, improving skills levels and improving access to good and well-paid employment. Key policies include:

- The launch and rollout of partnerships between government and industry to increase sector productivity through Sector Deals in the life sciences, construction, artificial intelligence and automotive sectors.
- Over £20 billion in investment in innovative and high potential businesses including the establishment of the £2.5 billion Investment Fund.
- The commissioning of a review into what actions may be most effective in raising productivity among SMEs.

Figures 13-18 provide an indication of the strengths and weaknesses of the business environment in D2N2. Key messages include that there is an above average number of business births compared to the other Midlands Engine LEP areas (a function of size) – but modest rates per 10,000 head of population. D2N2 also has notable concentrations of employment in manufacturing, health and business services compared to the Midlands Engine – notwithstanding the recent decline in the rate of births.

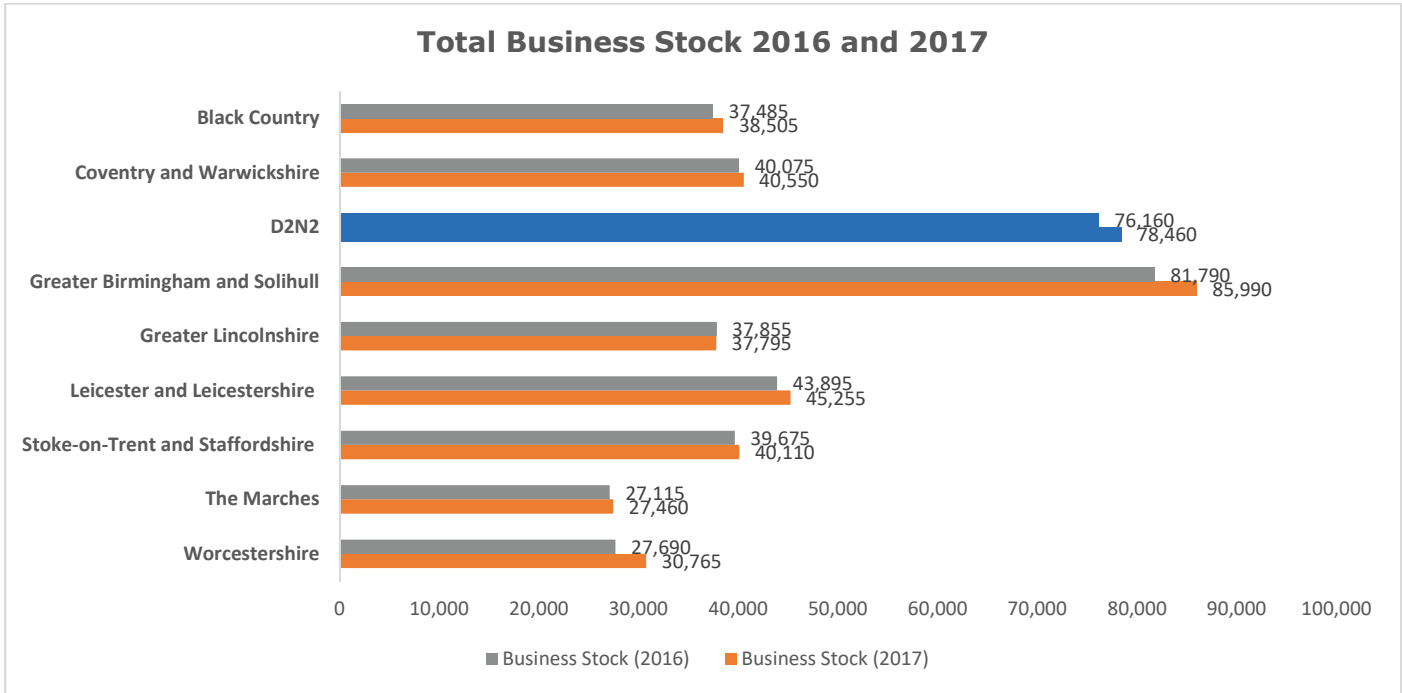


Figure 13 Source: ONS Business Demography (2018)

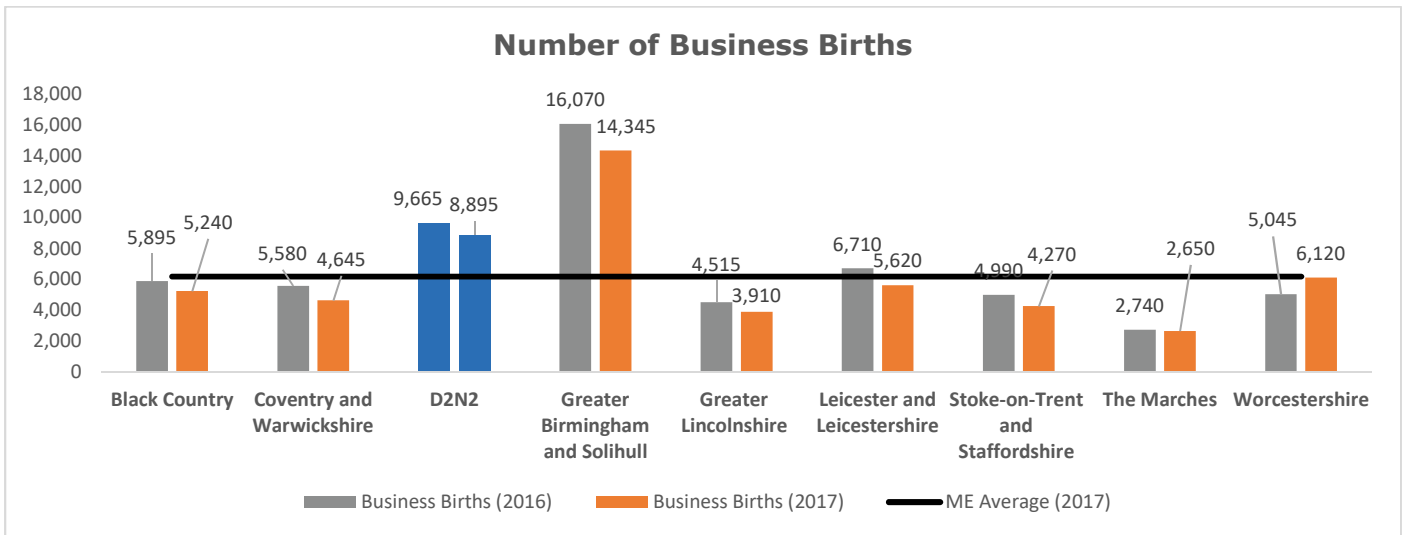


Figure 14 Source: ONS Business Demography (2018)

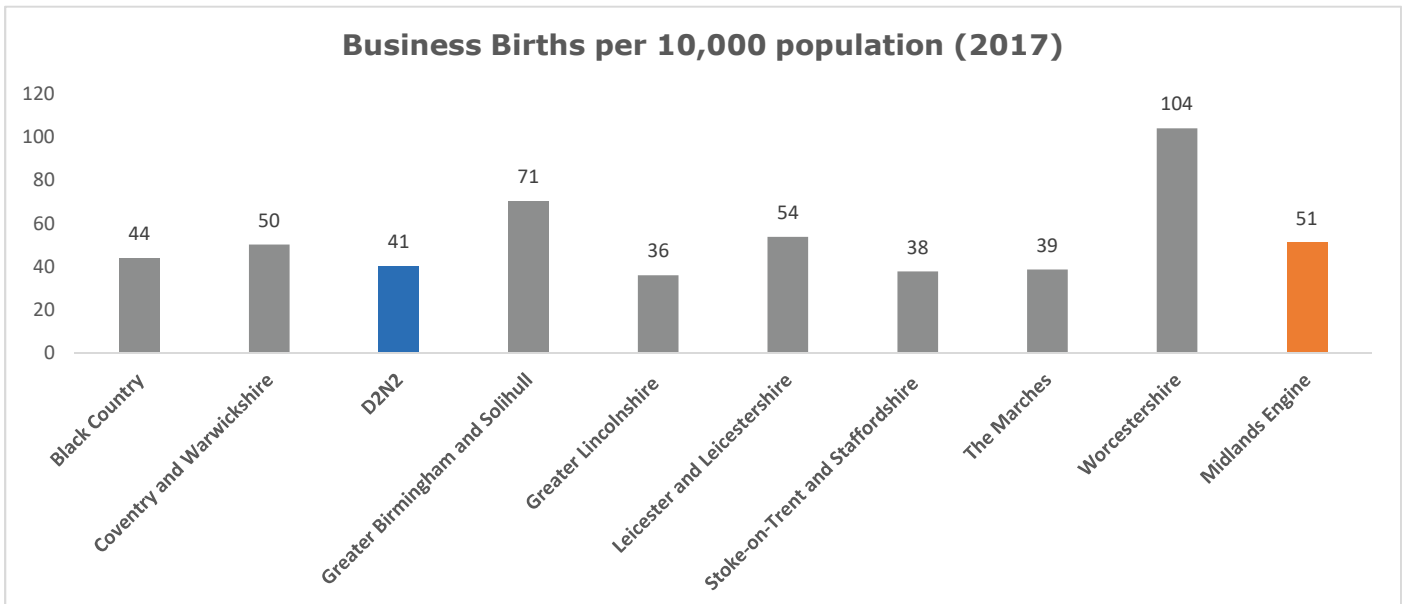


Figure 15 Source: ONS Business Demography (2018)

Proportion of Start-ups Generating £1m+ Revenues after 3 Years in the UK (2017)

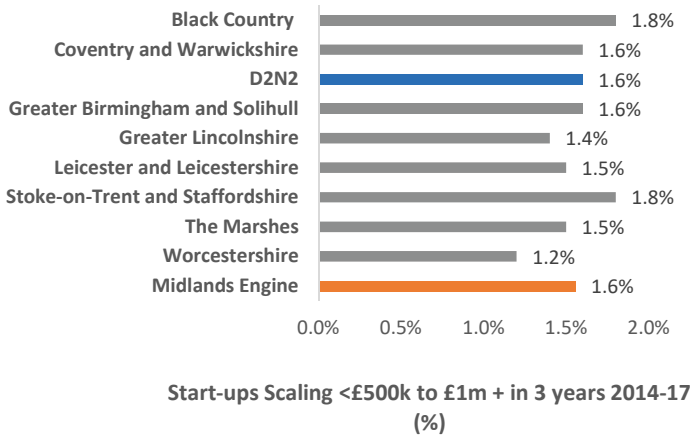


Figure 16 Source: Enterprise Research Centre UK Local Growth Dashboard, 2018

Firms (born<2013) turnover £1-2m in 2014 and reaching £3m+ in 2017 in the UK

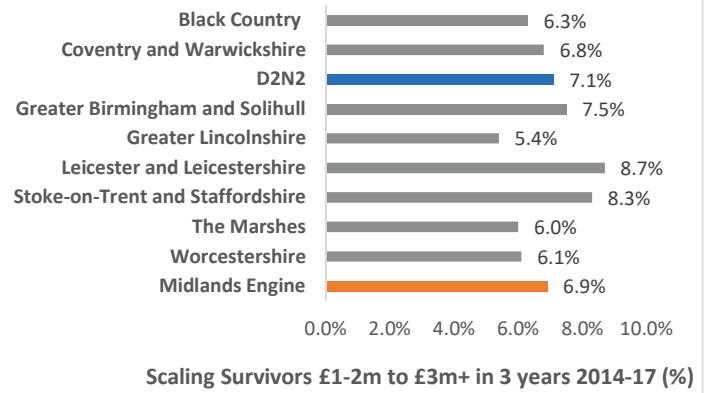


Figure 17 Source: Enterprise Research Centre UK Local Growth Dashboard, 2018

Jobs by broad sector (%)

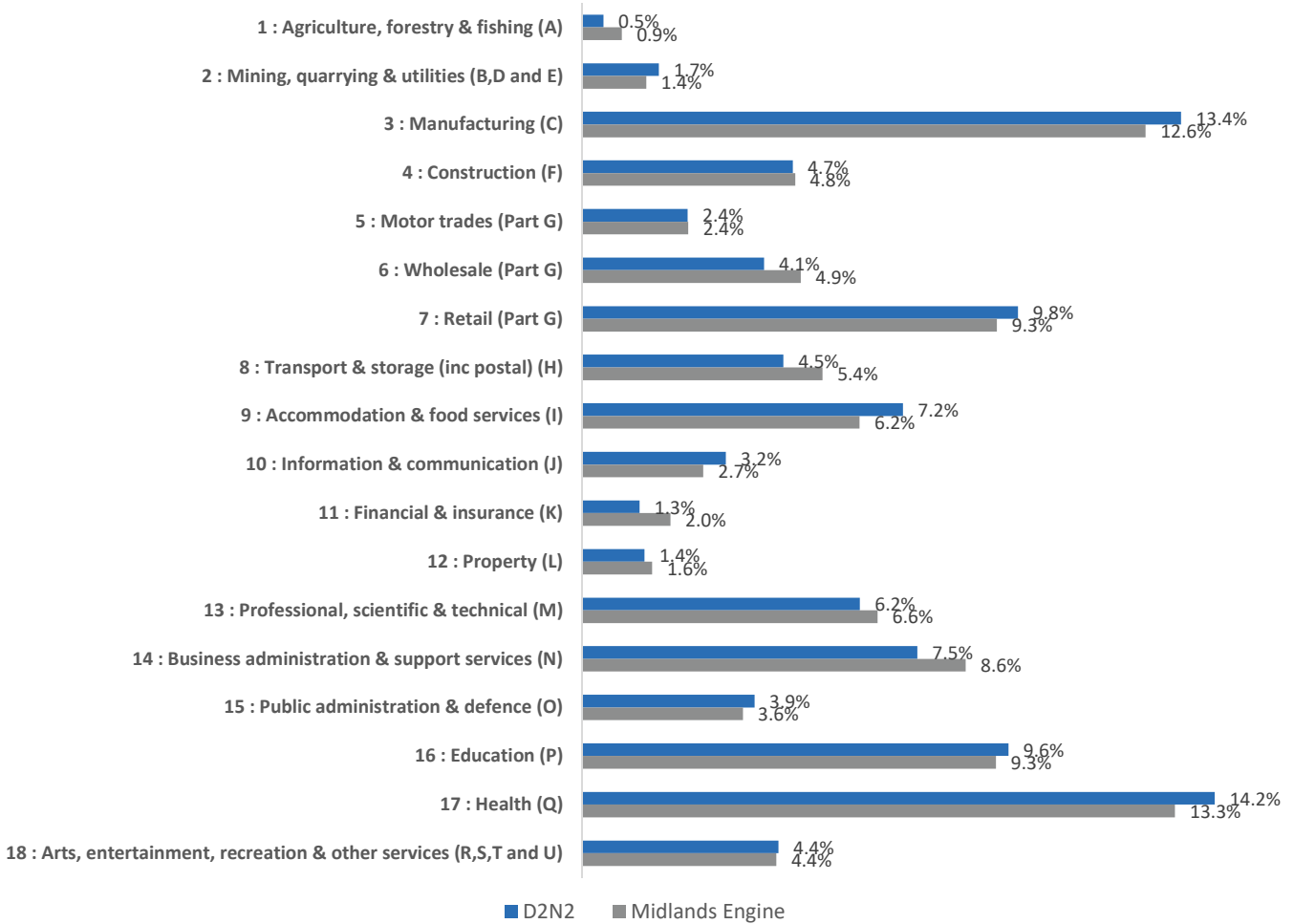


Figure 18 Source: Business Register and Employment Survey (2019)

Assets

Figure 14 shows that there is strong business growth within the D2N2 LEP area, with D2N2 having the second largest number of business births in the Midlands Engine between 2016 and 2017. It should be noted that much of the increase in business births in Worcestershire and Greater Birmingham and Solihull is likely to be related to a management company in Bromsgrove registering large numbers of businesses at a single address, this error will be corrected in the next data from ONS. Given that Worcestershire LEP area has the smallest population in the Midlands Engine, the impact of this company on the overall number of business births per 10,000 of the population is likely to be high in Worcestershire.

There is also a strong manufacturing sector within the D2N2 LEP area as can be seen in Figure 18. The proportion of jobs in manufacturing is higher than the Midlands Engine average of 12.6% at 13.4%. Part of this manufacturing strength is associated with manufacturers such as Rolls Royce, Bombardier and Toyota who are all present in the area. Figure 18 also indicates the strength of the workforce engaged with the health sector. This reflects the Queen's Medical Centre (QMC) in Nottingham, the country's largest purpose built teaching and research hospital when opened in 1977, coupled with the presence of wider health services in the locality.

Barriers and Challenges

D2N2 LEP area suffers from low productivity in comparison to the rest of the UK. In their [Vision 2030 Strategy](#), the LEP acknowledges that *"We produce too little output for the numbers of hours worked; and have too many people in lower paid jobs and too few in higher paid occupations"*.

Opportunities

Opportunities exist to build on the notable concentration of life-science linked activity particularly in and around Nottingham.

Rail related technical expertise centred on Derby is likely to play a key role in the national delivery of HS2.

The combination of business services, finance and big data expertise centred on Nottingham emphasised in Figure 16 is of note in relation to the growing Fintech sector in the UK.

The opening of a £24 million [Advanced Manufacturing Building](#) at the University of Nottingham in 2018 offers opportunities to develop digital manufacturing in the area. The centre will help leading manufacturers to deliver world-class research and transfer the knowledge created into high-impact industrial technologies. The centre will support start-ups by providing technical support, training and expertise require to commercialise the latest research results of the Institute.

D2N2 LEP also hopes to address the productivity gap in the area through refocusing the D2N2 Growth Hub to enhance business productivity. Changes include expanding provision of High Growth business support focused on small but productive businesses, and creating a single point where employers can access employment and skills information and support.

Biocity case study

- Project Lead – Nottingham City Council.
- £6.5m of Local Growth Funding towards a £31.3m facility.
- The Biocity expansion project aimed to develop 51,000ft² of new flexible 'move-on' space for young and growing Medical Technology and Bioscience businesses to capitalise on the cluster of the industry within Nottingham.

The project has proved successful in its aims since opening in 2017 and has created over 250 new jobs in Nottingham in the sector.

Going Forward

D2N2 has a vast landscape of business support programmes and the LEP recognises that it needs to make it easier for businesses to access the support they need when they need it through the Growth Hub. ERC research shows that many businesses experience growth episodes rather than a smooth growth trajectory. The LEP has identified a need to implement a targeted, data-driven approach to help businesses reduce the barriers to growth they face, whether it's access to finance, new markets or high-quality business premises. The barriers differ depending on industry, level of ambition and market opportunities. This support should span all industries with specialist expertise offered in our priority sectors and emerging clusters.

A Low Carbon Industrial Cluster, for instance, will take advantage of D2N2's assets, research and innovation capabilities in Energy and Sustainability, and skilled manufacturing workforce to re-deploy the manufacturing workforce displaced by automation and take advantage of the global demand for low carbon goods and services. With the Growth Hub as an entry point, the businesses developing and offering low carbon goods and solutions will have access to packaged support depending on their immediate and future needs.

- D2N2 LEP will prioritise strengthening the D2N2 Growth Hub and the support it offers to deliver productivity growth across sectors, through better access to exporting, finance, digitalisation, innovation and leadership and management support.
- It aims to ensure better co-ordination and alignment of support for businesses across the region.
- It will support high Growth, productive 'Scale-Ups' through expanding provision of High Growth business support, focused on small but productive businesses.
- The LEP will also seek to expand its business stock, increasing the overall business stock, through inward investment, and new indigenous enterprises.
- It also envisages that focus will be placed on continuing to maximise opportunities for more firms to export and explore new market opportunities in a post Brexit economy.



Biocity, Nottingham



PLACE



80.0%
URBAN
POPULATION



14/38
LEP AREAS IMD
AVERAGE RANK



3.1 MILLION
VISITOR TRIPS



8.0 MILLION
VISITOR
NIGHTS

The Place Foundation within the Industrial Strategy aims to create prosperous communities across the UK, as competitive cities, towns and rural areas are crucial to shaping the UK's economic future. It acknowledges that whilst the UK has world-leading businesses across the UK, greater disparities in regional productivity exist than in other European countries, shaping people's pay, work opportunities and life chances.

Key policies introduced to support delivery of the Place Foundation include:

- The requirement for Local Enterprise Partnerships and Mayoral Combined Authorities to agree Local Industrial Strategies, which build on local strengths to deliver on economic opportunities.
- Establishing the Transforming Cities fund providing £1.7 billion to support intra-city transport projects driving productivity by improving connections within city-regions.
- The piloting of a £42 million Teacher Development Premium to test the benefits of a £1000 budget supporting the professional development of teachers working in areas that are struggling.

The Foundation connects to the other Foundations in terms of improved skills, better-connected infrastructure, strengthened cultural assets and identification of suitable land for housing growth across the country. D2N2 is unique in the Midlands Engine in that it includes two major cities but also one of the nation's most visited National Parks – The Peak District. It has a largely urban population, but very significant rural hinterland including the Peak District. There is a concentration of relative deprivation in the cities and former coalfields areas in the north of the sub-region.

RURAL POPULATION

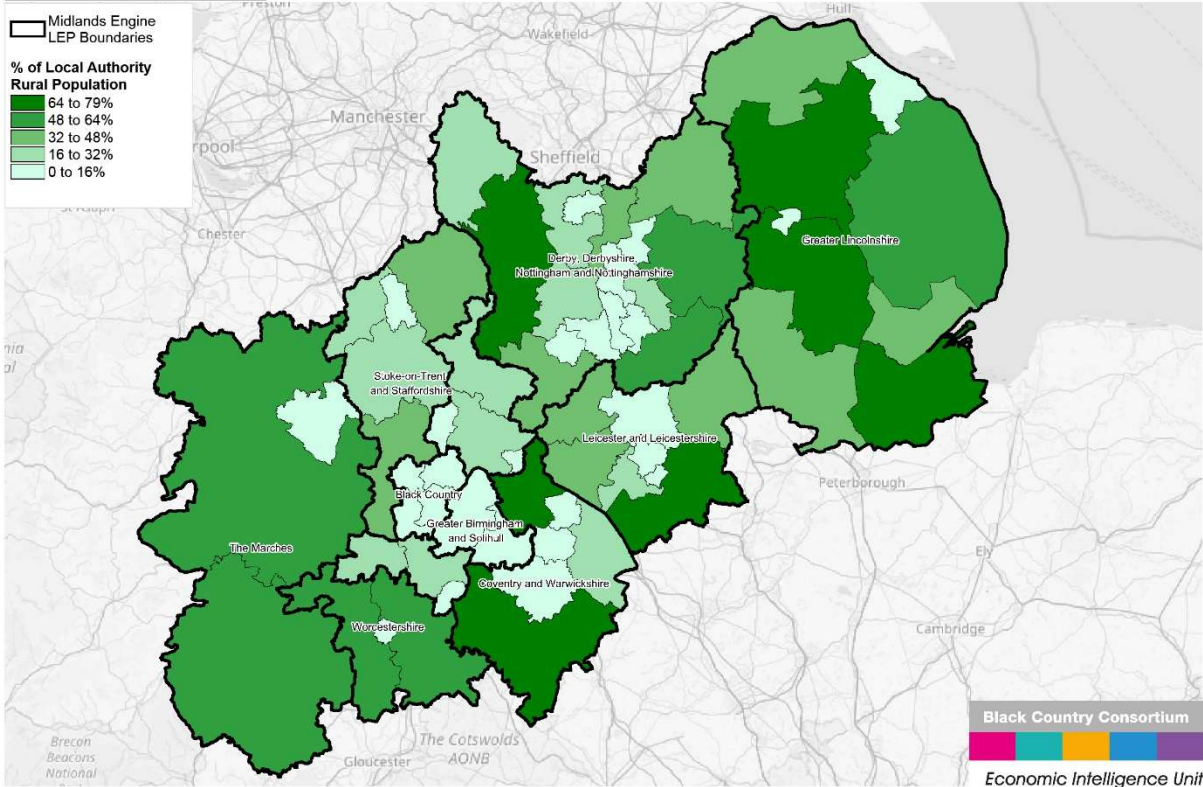


Figure 19
Source:
Huggins et al (2019)

INDICES OF MULTIPLE DEPRIVATION

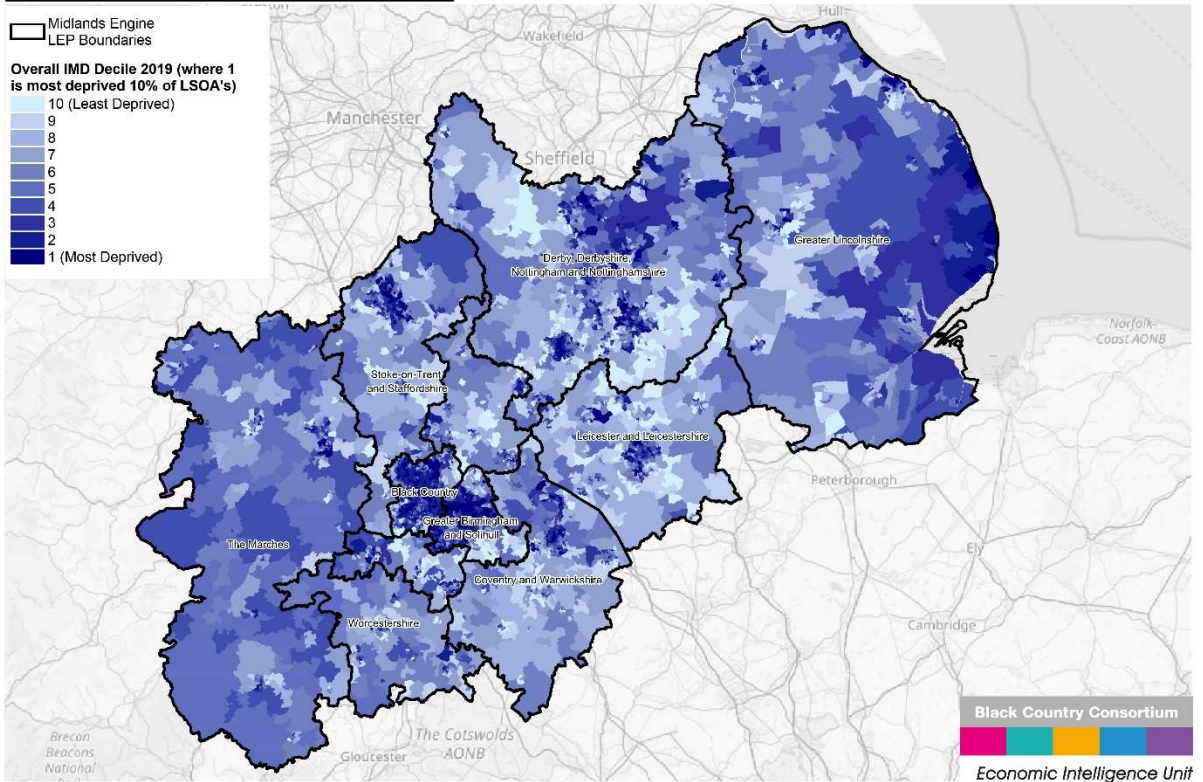


Figure 20
Source:
Gov.uk (2019)

UK COMPETITIVENESS INDEX

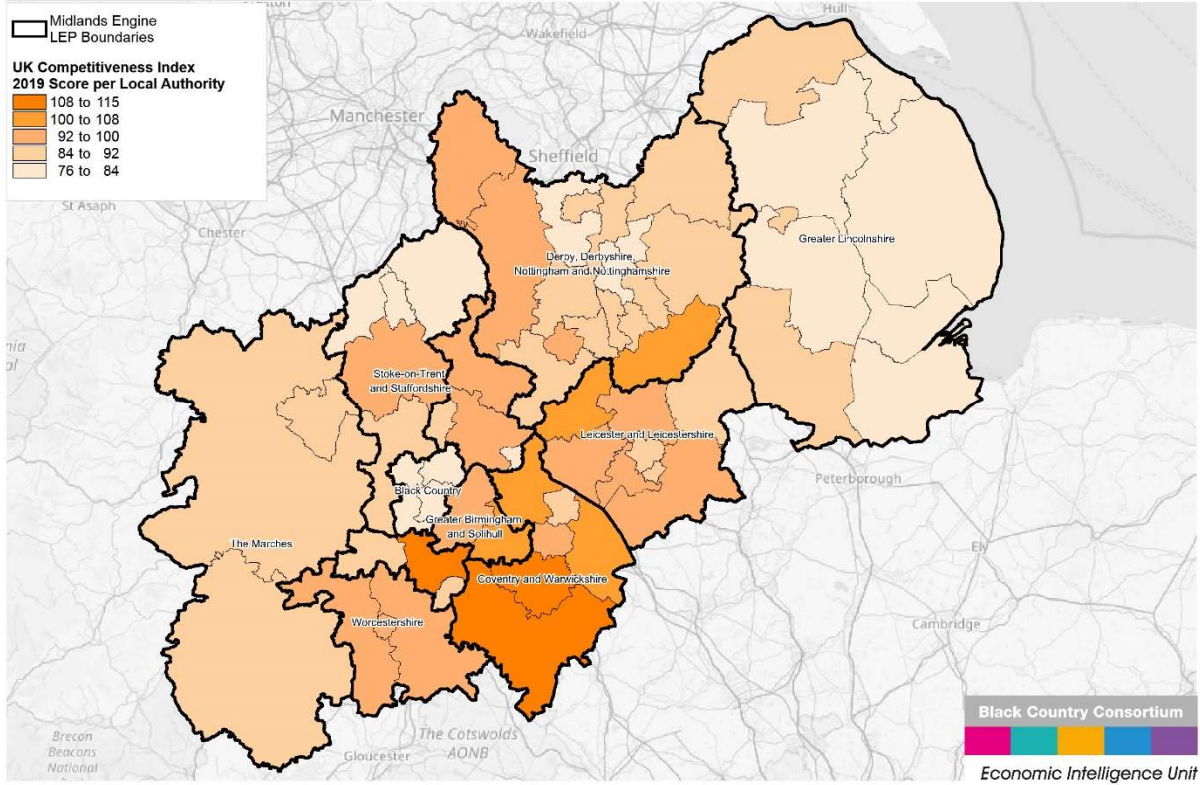


Figure 21
Consumer Data Research Centre (2017)

The UKCI benchmarks the competitiveness of the UK's localities based on an integrated measure of competitiveness focusing on both the development and sustainability of businesses and the economic welfare of individuals.

INDEX OF ACCESS TO HEALTH ASSETS AND HAZARDS - PHYSICAL ENVIRONMENT

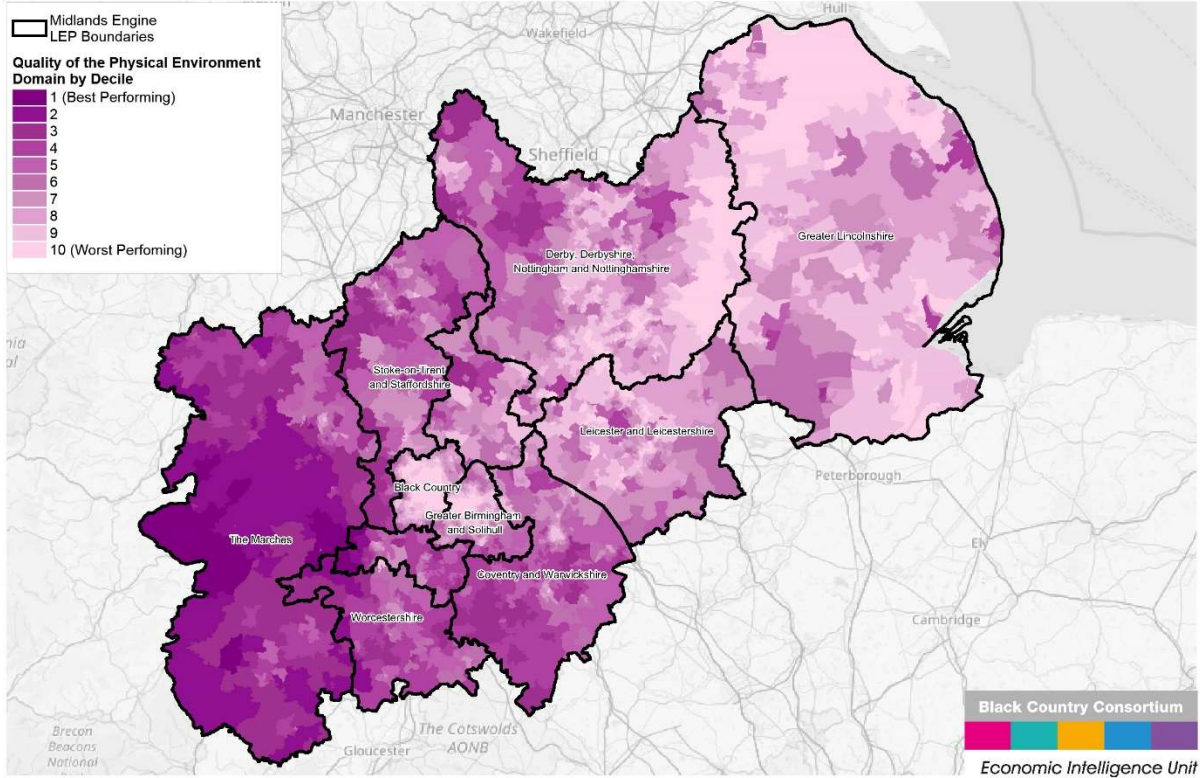


Figure 22
Source: Gov.uk (2015)

The Index of 'Access to Health Assets and Hazards' measures how 'healthy' neighbourhoods are. The domain of physical environment relates to the presence of green space and three air pollutants.

INDEX OF ACCESS TO HEALTH ASSETS AND HAZARDS - RETAIL ENVIRONMENT

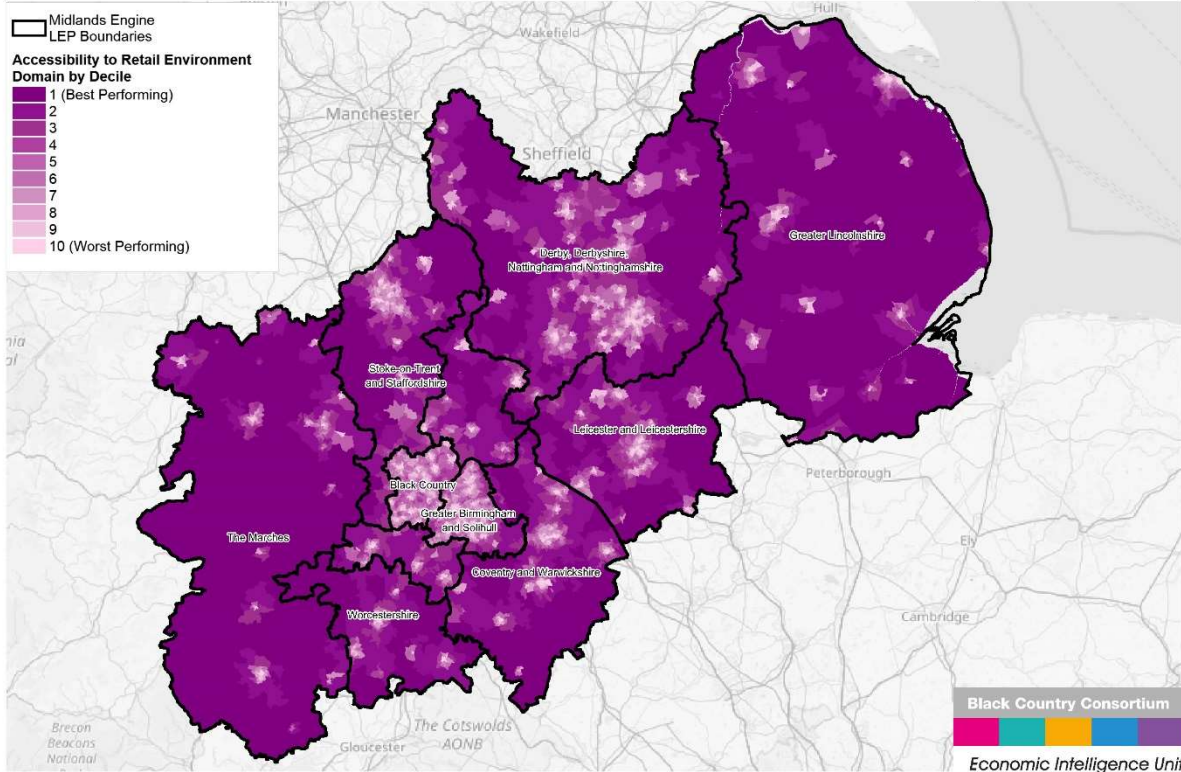


Figure 23
Source: Gov.uk (2015)

The domain of accessibility for Retail Environment relates to specifically access to fast food outlets, pubs, off-licences, tobacconists and gambling outlets. A healthy area perspective better / more access would equate to worse score.

INDEX OF ACCESS TO HEALTH ASSETS AND HAZARDS - HEALTH SERVICES

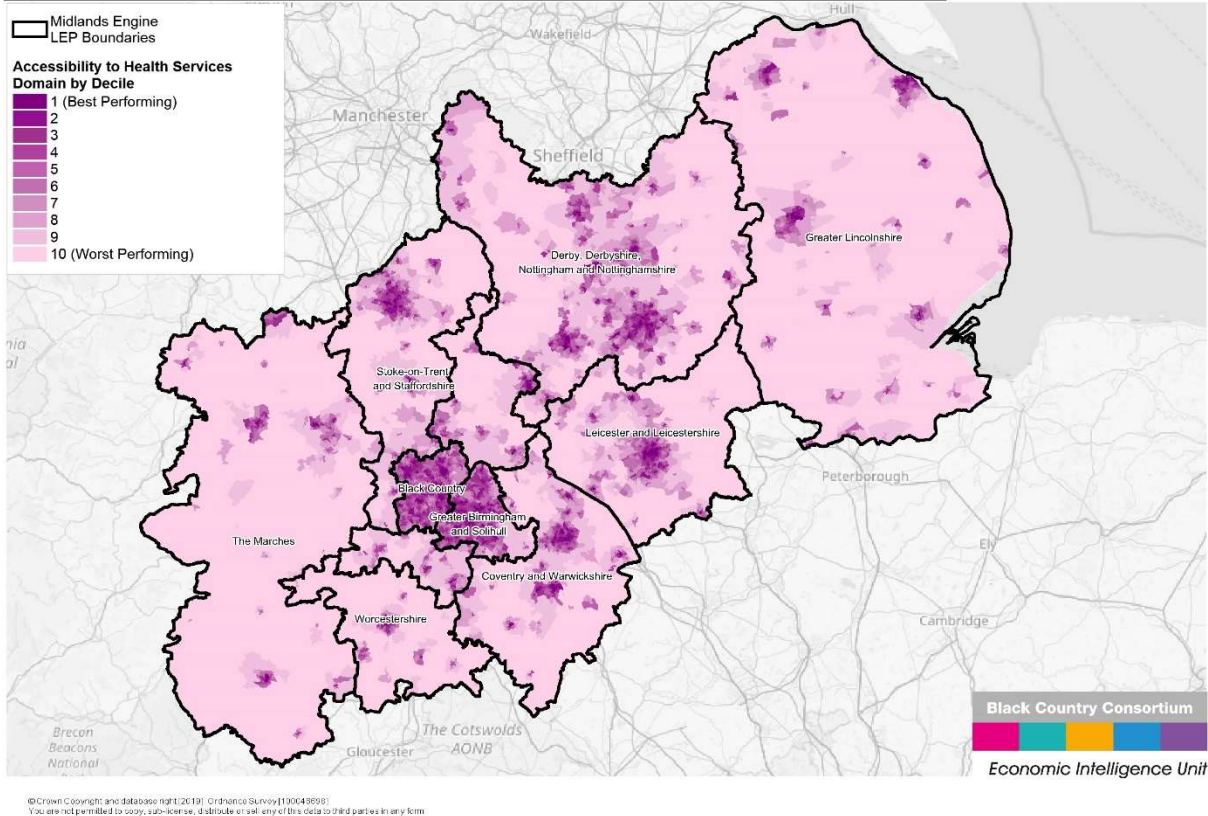


Figure 24
Source: Gov.uk (2015)

The domain of Health services relates to access to GPs, hospitals, pharmacies, dentists and leisure services

INDEX OF ACCESS TO HEALTH ASSETS AND HAZARDS

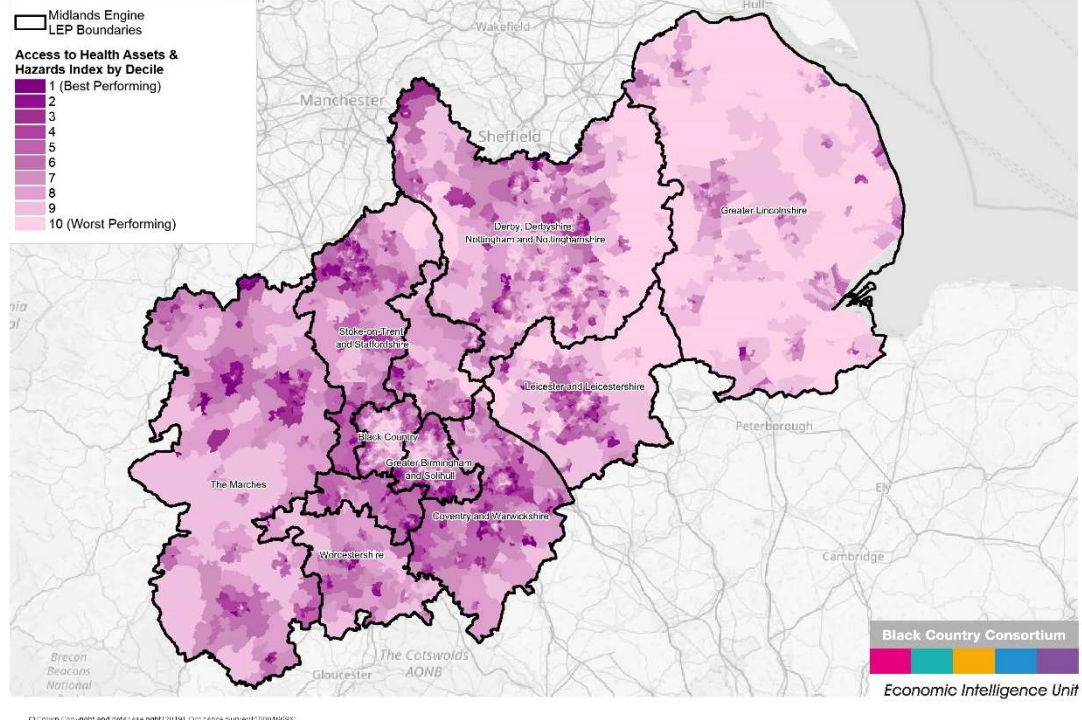


Figure 25
Source: Gov.uk (2015)

This graph shows the overall multi-dimensional index score for each area in the Access to Health Assets and Hazards Index, combining the indicators under the three different domains of accessibility shown above: retail environment, health services and physical environment.

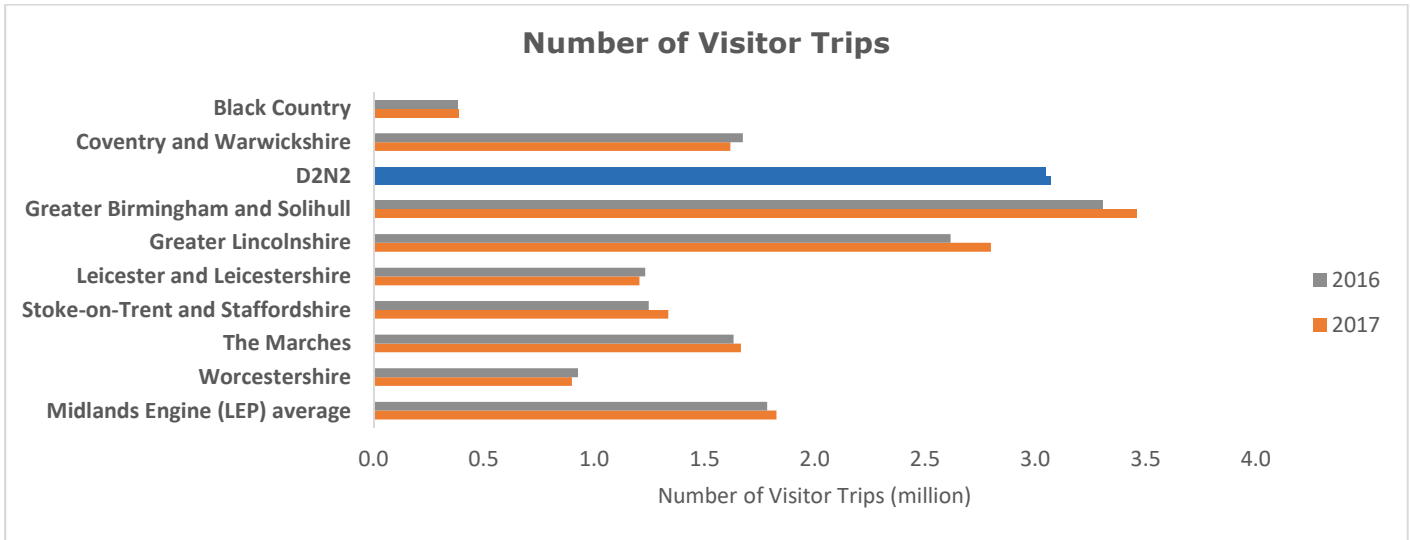


Figure 26 Source: Visit Britain: Great Britain Tourism Survey (2018)

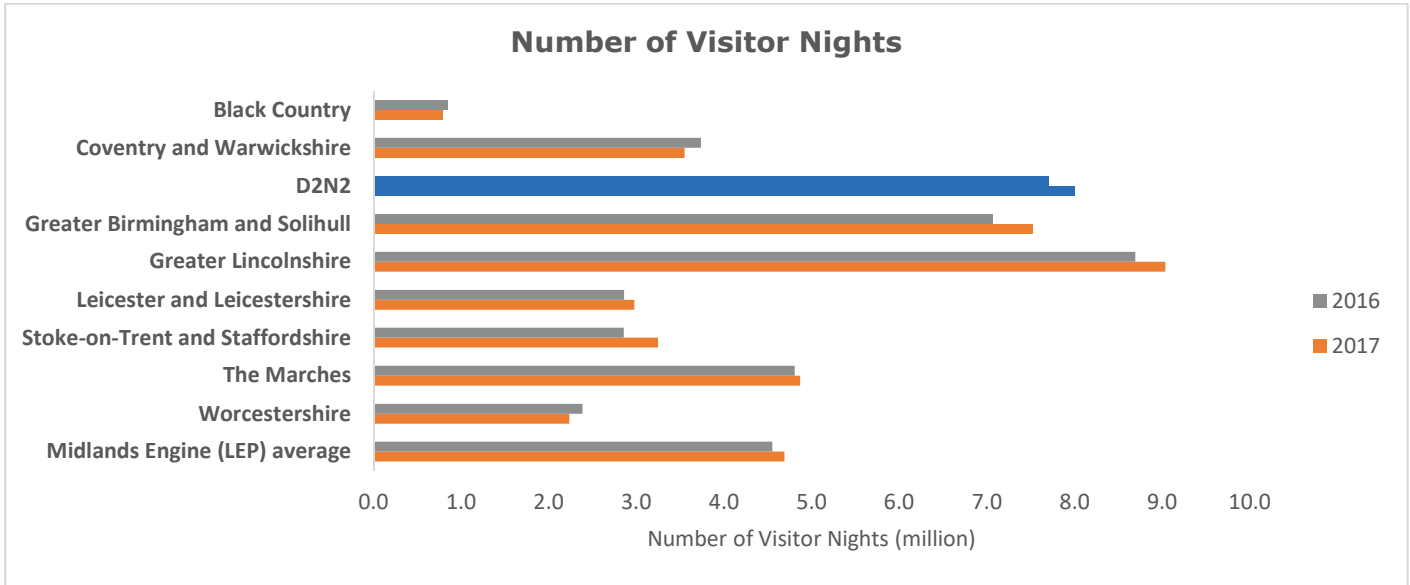


Figure 27 Source: Visit Britain: Great Britain Tourism Survey (2018)

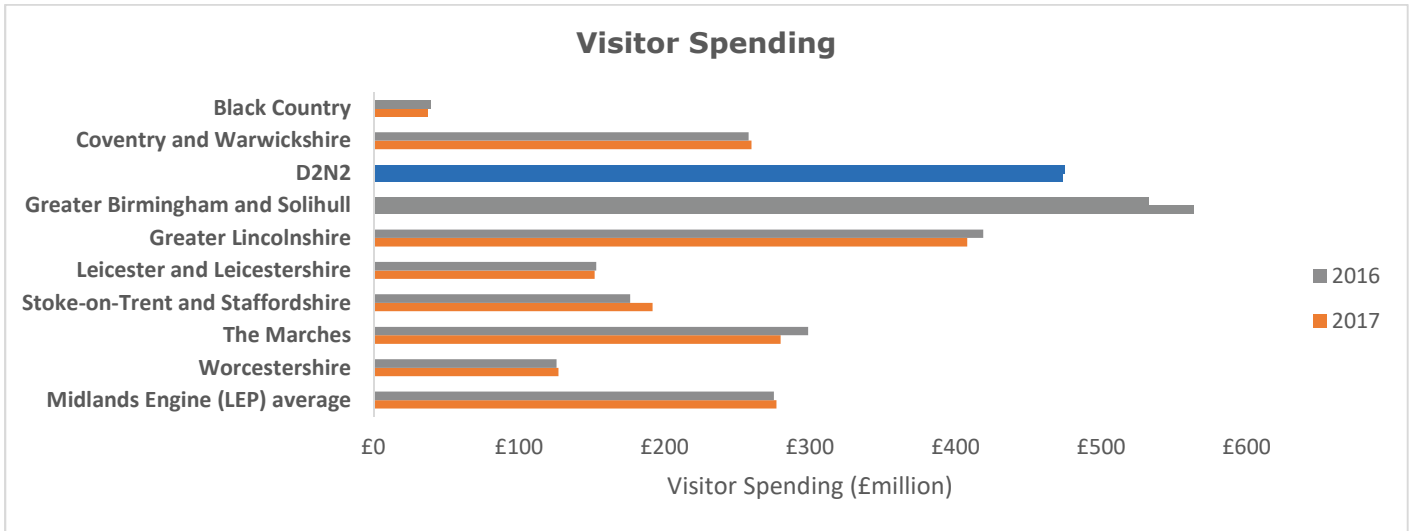


Figure 28 Source: Visit Britain: Great Britain Tourism Survey (2018)

Number of dwellings started and completed 2018-2019

	Dwellings started				Dwellings completed			
	Private Enterprise	Housing Associations	Local Authority	All	Private Enterprise	Housing Associations	Local Authority	All
Black Country	1,600	180	260	2,040	1,770	170	250	2,190
Coventry and Warwickshire	2,710	1,010	0	3,720	3,250	910	0	4,160
D2N2	4,920	620	30	5,570	5,040	710	70	5,810
Greater Birmingham and Solihull	4,000	790	90	4,880	3,410	910	20	4,340
Greater Lincolnshire	3,070	340	10	3,420	2,740	510	40	3,290
Leicester and Leicestershire	2,540	560	0	3,140	2,770	700	0	3,440
Stoke-on-Trent and Staffordshire	2,850	440	10	3,300	3,060	650	10	3,710
The Marches	2,470	330	40	2,840	2,190	610	100	2,900
Worcestershire	1,850	630	0	2,470	1,680	640	0	2,320

Figure 29 Source: Gov.uk (2019)

Assets

Figure 29 shows that D2N2 has the highest number of new dwellings started and completed in the Midlands Engine. 5,570 dwellings were started and 5,810 dwellings were completed by the end 2018. With the current housing crisis of too much demand and not enough supply the building of so many new dwellings is likely to be beneficial, as new dwellings will attract buyers into the area. Thus, widening the workforce pool and boosting the local economy, as living within the local economy usually means spending within it as well.

Another area in which D2N2 is performing strongly in relation to the Place Foundation is the tourism sector. Figure 26 shows that D2N2 sees area 3 million visitor trips per year the second highest result. This is alongside Figure 27, which shows that D2N2 also has the second highest number of visitor nights as well, at 8 on average. Visitor spending is also high at just short of £500 million per year according to Figure 28. This could be due to the large number of tourist attractions, which D2N2 LEP boasts. These include the Peak District National Park, one of the most visited national parks in the UK - as well as heritage based visitor attractions such as Derwent Valley Mills World Heritage site, Chatsworth House, Hardwick Hall, Bolsover Castle and Rufford Abbey. Residents in the area can also benefit from other outstanding natural assets in D2N2 such as Sherwood Forest and the Trent Valley.

Barriers and Challenges

The presence of extractive industries – particularly sand and gravel in the Trent Valley and limestone in the Peak District present environmental challenges. Figure 22 indicates how the quality of the physical environment in terms of green spaces and the presence of three air pollutants varies considerably across D2N2.

A [big gap in GVA](#) can be identified between the most and least prosperous parts of D2N2 LEP area. According to the latest data compiled by the Midlands Engine Economic Observatory whilst Nottingham has a GVA rate per head of population of £29,400, this falls to £12,600 in North East Derbyshire and £12,400 in Gedling.

A further challenge in D2N2 is access to healthcare services such as GPs, hospitals, pharmacies, dentists, leisure services. Figure 24 shows that access to such services is much better in urban areas within D2N2 than in rural areas. Nonetheless, this barrier is not as large as in other LEPs in the Midlands Engine.

Opportunities

Further de-commissioning of fossil fuel/coal fired power generation will remove major point sources of CO₂ emissions within D2N2 while also freeing up major development sites.

D2N2 LEP emphasises opportunities to grow their visitor economy in their [Vision 2030 strategy](#). These include targeting new markets, offering higher value experiences, extending the 'season' and increasing the global market share of international leisure visits, business visits and the events sector. For example, the LEP stresses the potential to develop marketing of capital investment in Derwent Valley Mills World Heritage site.

Case Study: Museum of Making, Derby

- Project Lead – Derby City Council.
- £3.7m of Local Growth Fund.
- The project involves the renovation of the Derby Silk Mill to create the new 'Museum of Making' which showcases Derby's industrial heritage on the site of the worlds first factory in the UNESCO designated 'Derwent Valley Mills World Heritage Site'.
- D2N2 has strategically invested in this project to enhance the visitor economy sector. The sector is a key area within D2N2's local area and contributes over £3billion per annum to the local economy.
- The project also offers benefits such as new managed workspaces and workshop space to encourage SME growth in Derby.

Going Forward

- D2N2 LEP identifies an important role seeking to maximise the opportunities from the de-commissioning of 3 coal fired power stations as a catalyst for economic growth on those sites.
- It aspires to co-ordinate a concerted approach to encouraging greater overnight stays to boost the sustainability and productivity of the visitor economy.
- Supporting the vitality of our cities and urban areas and in particular maximising the opportunities of investment from the national towns fund will be prioritised.
- Addressing rural deprivation through strategic investment in transport and infrastructure is another important area of focus.
- The LEP intends to work with Homes England to unlock barriers for accelerating housing delivery including the promotion of Modern Methods of Construction.
- Programmes and projects will be driven by the goal of ensuring that D2N2's economic growth objectives continue to promote and protect the natural environmental assets within D2N2 LEP area.



Buxton Crescent, Derbyshire

Local Authorities in D2N2 LEP area:

Amber Valley
Ashfield
Bassetlaw
Bolsover
Broxtowe
Chesterfield
Derby
Derbyshire Dales
Erewash
Gedling
High Peak
Mansfield
Newark and Sherwood
North East Derbyshire
Nottingham
Rushcliffe
South Derbyshire

Prepared on behalf of the Midlands Engine by:



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BIRMINGHAM BUSINESS SCHOOL



Economic Intelligence Unit



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