

Bradford Economic Intelligence

25 July 2017

Metro — Dynamics

Contents

Executive Summary	3
The Bradford Economy	5
Macroeconomic picture	7
Population dynamics	9
Workforce self-containment	12
Sectoral analysis	16
Young wealth creators	21
Property market	25
Skills dynamics	29
Inclusive growth	30

Executive summary

Bradford is one of the great cities of the UK. During the 19th century, industrial innovations established Bradford as the wool capital of the world. Today, the district is an economy worth over £9.5 billion and with trade links to countries across the globe.

This report was commissioned by Bradford Metropolitan District Council to provide an analytical base to inform the development of a new economic strategy. From this analysis we suggest a number of strategic priorities that could drive the future success of Bradford.

Bradford has a young and growing population. It is characterised by high birth rates and high inward international migration. This is countered by many residents, particularly the younger (25 to 34) economically valuable cohorts leaving Bradford on an annual basis mainly to nearby areas and other northern locations. By developing and promoting the right housing and employment offer, Bradford has the potential to reverse these patterns **and retain and attract more younger residents who are currently leaving Bradford**, for the economic benefit of the district as a whole.

Although Bradford's labour market is relatively self contained, many of its residents work in Leeds. A high proportion of these are bright young professionals who commute to jobs in the professional services sector. The evidence suggests that while commuting patterns are strong, the cities are functioning as separate labour markets. An opportunity exists **to capitalise on synergies and create new complementary assets that deepen the relationship between Bradford and Leeds** and build cooperation for the benefits for both cities.

Bradford's sectoral strength remains its traditional manufacturing base, largely born from the textiles industry. Today there is evidence of emerging growth in a number of niche new-economy sectors. Supported with the right physical and digital infrastructure these can be the seeds of growth that can also attract young professionals. Sharing expertise from established companies in creating trade networks can ensure the success of new sectors together with continuing **to develop Bradford's Producer City economy, supporting the growth of businesses in traditional and new-economy sectors**.

Cities compete for young wealth creators, defined as the people who create the new technologies, businesses and jobs of the future and stimulate wider economic growth. Evidence reveals clusters close to the centre of Bradford and in Saltaire. **To retain them, maximise their potential as generators of success and draw in more entrepreneurs, investment must capitalise on Bradford's relevant strengths**. These include under-utilised heritage and historic buildings that define its city-scape to create desirable living and working spaces; cultural diversity; the ideas and potential of the cities young people and available and affordable property.

Infrastructure capacity and connectivity are identified as a consistent constraint on Bradford's prosperity. Analysis reveals they have an impact on business location, property values and attracting companies and residents. **Improving transport connectivity** between areas and nearby urban centres, together with investment in direct rail connectivity to main UK cities will be critical.

This is not an easy task. The analysis reveals that, like West Yorkshire, Bradford's economy has yet to rebound to pre-2008 recession levels with GVA per capita lower than it was before the decline. Levels of qualifications and labour market participation in Bradford are below the national average, and many of the district's brightest residents are leaving the district or work in high-value jobs elsewhere. But the findings of this analysis highlight major strengths and signs of emerging new growth which, with the appropriate support and investment, provide significant opportunities to ensure Bradford's ongoing success.

Based on the analysis 5 key strategic priorities are suggested for Bradford:

- Retain and attract more younger residents who are currently leaving Bradford to neighbouring areas.
- Deepen the relationship with Leeds to become cooperative so that both cities benefit from the creation of new complementary assets.
- Continue to develop the 'Producer City' economy, supporting growth in traditional and new-economy sectors including through shared expertise.
- Retain and grow clusters of young wealth creators in the centre of Bradford and Saltaire to maximise their potential by capitalising on and investing in the city's many relevant strengths.
- Improve transport connectivity and capacity between areas within the district and nearby urban centres, and invest in direct rail connectivity to main UK cities.

The Bradford Economy – Building on existing and emerging strengths

This analysis of Bradford's people, economy, business, skills and property that follows was commissioned by Bradford Metropolitan District Council. It provides a foundation that has informed discussion, engaged stakeholders and provided input to the development of a new economic strategy.

It reveals a district continuing to experience slow recovery in growth since the 2008 recession together with below average qualifications and labour market participation. However, almost without exception, its many challenges are countered by strengths and opportunities that if acted upon can reverse the issues and provide the potential to stimulate accelerated economic growth and prosperity for Bradford's businesses and residents alike.

The story of Bradford is of a young city yet one that faces the challenge of losing bright and economically valuable professionals. It is a district with strong traditions as a manufacturing centre yet sectors of new growth are only just emerging. Bradford has significant available space with affordable commercial and residential property, yet it lacks the foundation of skills businesses are seeking; although the majority of Bradford residents work in the district and there are strong connections with Leeds, Bradford's transport infrastructure lacks connectivity and capacity.

Population Dynamics: Bradford is a city with a significantly higher proportion of children than many other cities. The high fertility rate combined with international inward migration ensures the population of the city is growing. However, behind this increase in population, there are particular portions of the population that are declining; namely, young people between ages 26 to 34. For that particular cohort there has been a decline due to net outward migration. The opportunity is to develop the residential and employment offer that reverses this trend and draws in young residents too.

Commuting Dynamics: The economy of Bradford is relatively self-contained. Nonetheless, a total of 27,500 people commute from Leeds into Bradford daily and 17,000 people commute from Bradford to Leeds. The analysis indicates that many commuters are young professionals who travel to Leeds city centre to take jobs in professional services. Workers commute into Bradford from different areas across the Leeds City Region. While there are clearly strong commuting patterns between the two cities, they appear to be functioning as two separate labour markets, with a surprisingly high level of self-containment in Bradford. This runs counter to the theory of urban agglomeration. Urban agglomeration occurs when the relationship between cities shifts from mainly competitive to one of cooperation. Cities with highly integrated urban agglomeration tend to function as one single labour market with differing and complementary specialisms across the wider area. The evidence shows there is an opportunity for the relationship between Bradford and Leeds to be deepened, so that agglomeration is supported and both cities could benefit through the creation of new complementary assets.

New Emerging Sectors: Bradford's sectoral strength has long been in traditional areas of the economy – these specialisms have made, and continue to make Bradford a 'Producer City'. The district has particular strengths in areas of manufacturing, many born out of the textile industry. However there is growing evidence that a number of new niche sectors are beginning to develop across the district – particularly in the areas of new media and telecoms. These green shoots provide significant potential thanks to the combination of technology with overseas trade links. For instance, the online gaming market in Pakistan is set for stratospheric growth; Bradford's residents are well positioned to create new cutting edge media technologies across a range of languages and use existing trade links to sell abroad. This would be exciting for Bradford as it expands the title of Producer City into the online and digital worlds.

Young Wealth Creators: There appears to be a cluster of young wealth creators based in Bradford city centre and Saltaire. Cities compete for young wealth creators, defined as the young people who create the new technologies, businesses and jobs of the future. So the analysis shows that while a number of young people commute out to Leeds to work in professional services, there are a number of young wealth creators who live and work in Bradford. Going forward the district will need to think about how to support and secure these groups of people. This will mean addressing infrastructure constraints, including slow broadband and lack of direct rail access. In addition, the creation of mixed-use developments and urban apartments are key to holding onto this group. The analysis shows that the range of businesses being created by these young wealth creators spans sectors and industries that have typically not been based in Bradford to-date.

Historic Buildings: It is thanks to Bradford's past riches and mercantile entrepreneurs that the city is blessed with a range of beautiful, historic buildings, many of which would be appropriate for the sorts of mixed-use developments young urban residents prefer. Bradford also has an advantage as property prices are extremely low compared to other parts of the country with many parts in decline over the last few years. Similarly, while there has been significant investment in the city centre, the transaction values of commercial property remain low. All of this provides the district with an opportunity to create the authentic and urban living experience that many cities across the UK and the world can only dream of. It should be noted that the low prices reflect low levels of demand. Building a vision and engaging investors to understand it and invest will be critical. Addressing issues such as direct rail connectivity will be paramount to this. Should investments like these happen, there is no reason why Bradford could not develop in a similar way to Brooklyn – home to the young and innovative who help to refashion and regenerate the city.

In conclusion, clear and recurring themes emerge from the analysis. The key question becomes which opportunities to pursue and how to make them happen. Retaining and attracting more younger residents who are currently leaving Bradford to neighbouring areas is vital in enabling economic growth. But it will require new employment opportunities and the development of appropriate residential offerings as well as finding ways, as other cities have, to better retain graduates. Deepening the relationship with Leeds to become cooperative is a potential way to begin this which will require shared vision and investment in the short term.

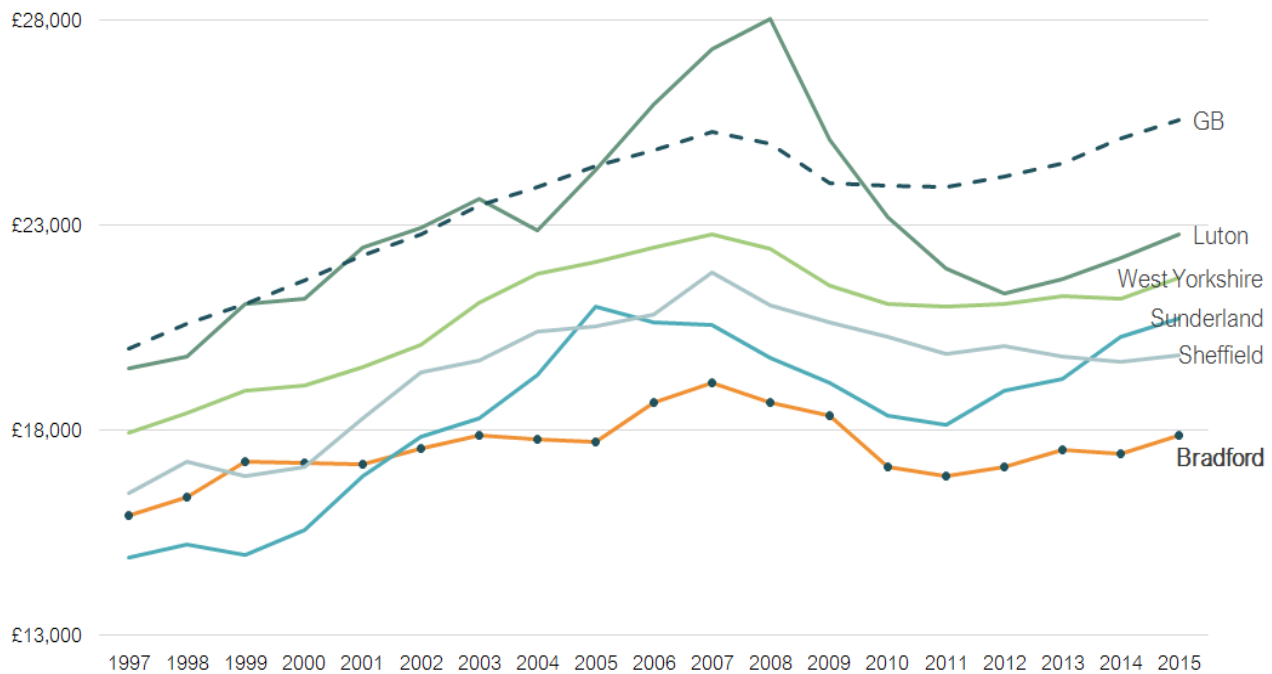
In order to create a necessary step-change in industrial productivity it is suggested that the 'Producer City' initiative is continued in order to develop the economy by supporting growth in traditional industries but that it is extended so the district does what it can to stimulate new-economy sectors such as new media and telecoms. In part this can be through facilitation of shared expertise as well as through development of business networks and finance.

Clusters of young wealth creators are an asset the district cannot afford to lose. Learning more about the needs of these communities and what characterises them locally can help inform and prioritise the precise investments required to enable them to grow and thrive. Bradford has much to build on, not least the heritage and availability of its built environment. By shaping business models and developing visions and profiles of the success and potential of specific sites across the district, it can become possible to engage and excite investors and create a new momentum and energy.

Improving transport connectivity and capacity emerges as a crucial enabler to almost every aspect of Bradford's economy. Increasing the ease and speed of movement of people particularly through rail networks will extend the reach of the city by connecting places where people want to live with businesses and employment across the district. A more detailed consideration and analysis of what is possible could be an important next step.

Bradford's GVA growth mirrors national GVA trend, but a step-change is needed

Figure 1 – GVA per capita 1997-2015



Source: Metro Dynamics analysis of ONS Regional Gross Value Added data

Bradford is a major UK economy that produced £9.5 billion of goods and services in 2015. However, on a per capita basis, Bradford's economy underperforms compared to neighbouring cities, and is significantly below the UK average. Bradford's economy has not fully recovered since the recession and GVA per capita remains lower than it was in 2009. As a result, the gap between average UK per capita GVA and that in Bradford is increasing.

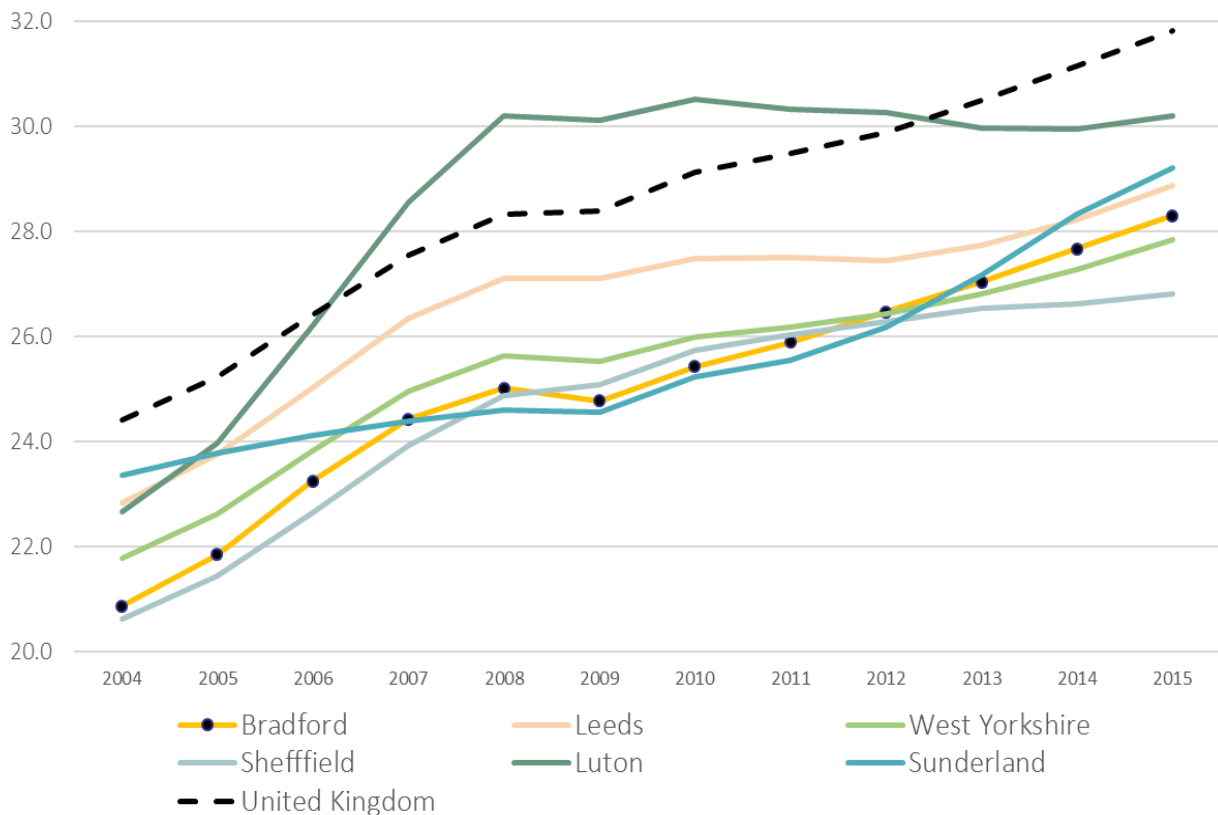
Luton has been included as a comparator with a population make-up similar to that of Bradford in that it has a large Asian base. Sheffield and Sunderland were included because they are also Northern cities going through long-term industrial restructuring.

In order to increase GVA significantly, a step-change in economic growth will be required. Opportunities for doing so are considered throughout subsequent analysis of industry sectors, population, skills and infrastructure.

Bradford District is considering a stretch target of £13.5 billion for GVA – an increase of over 40%. Other global cities have achieved such significant increases, but only through investment in game-changing infrastructure such as the creation of new direct rail links, or the establishment of a new airport.

The gap exists despite the strengthening productivity – a testament to Bradford’s businesses

Figure 2 – GVA per hour worked 2004-2015



Source: Metro Dynamics analysis of ONS productivity data

It is also useful to note that Bradford’s lower GVA per capita figures are not linked to issues of productivity. Bradford’s economy produces a greater volume of GVA per hour worked than Sheffield or the West Yorkshire Combined Authority. This is partially a testament to the number of large and significant businesses that are based in Bradford. Examples include William Morrison Supermarkets Ltd, Yorkshire Building Society, Provident Financial and Hallmark Cards.

The strong productivity figures are also a testament to the continued strength of manufacturing across the district – part of Bradford’s Producer City strength; manufacturing produces a higher GVA per hour worked than many other sectors.

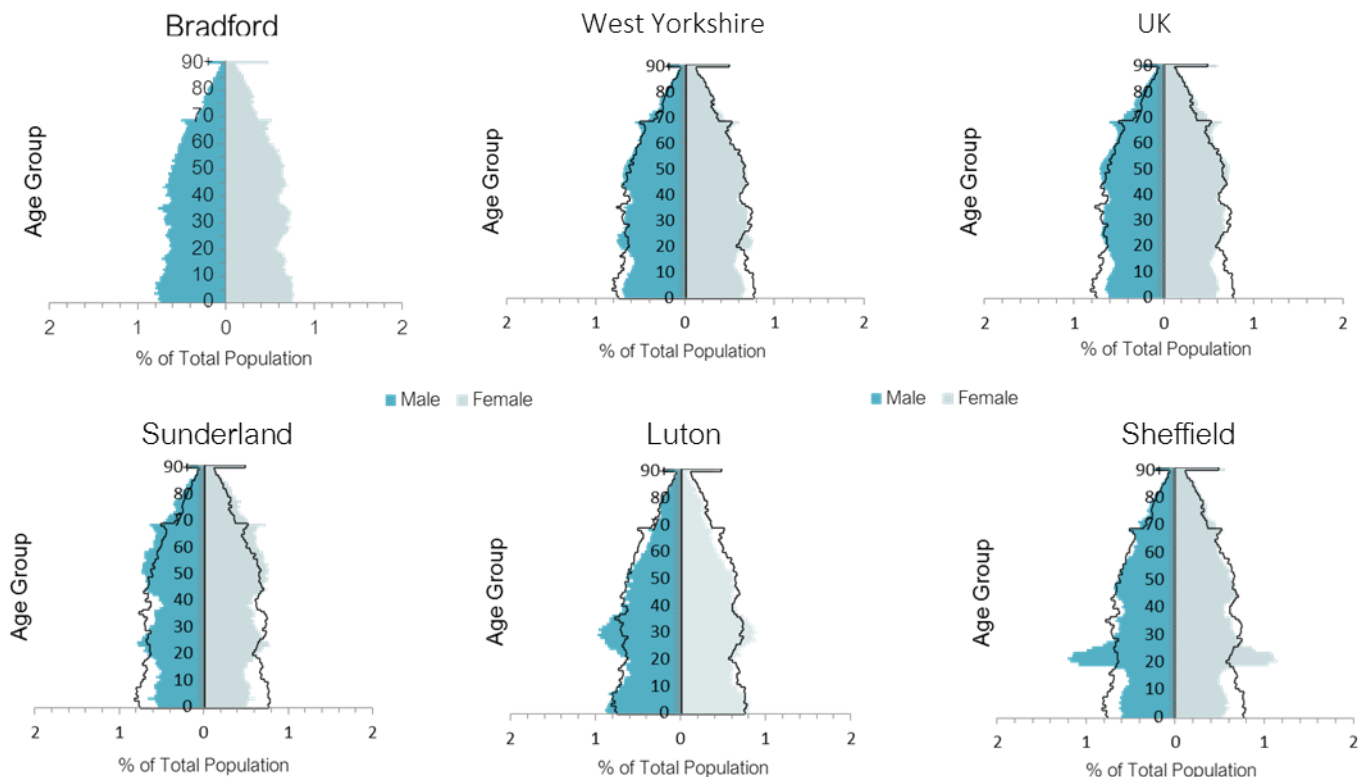
There remains a gap between productivity in Bradford and the UK average; this is a reflection of the higher productivity in the South East, and the gap with the UK average is smaller in Bradford than many other Northern cities.

GVA per hour worked

Bradford	28.29
Leeds	28.88
West Yorkshire	27.83
Sheffield	26.82
Luton	30.20
Sunderland	29.21
United Kingdom	31.82

Bradford is a young city with a growing population

Figure 3 – Population pyramids for Bradford and Comparators



It is well known that Bradford has a growing and particularly young population.

The population pyramids provide an overview of the age structure in Bradford and five comparator areas. They show the proportion of all residents in an area by gender and single year of age. The pyramid for Bradford is overlaid as a black outline on the others for simple comparison.

Most striking for Bradford's profile is the high proportion of children (bottom of the pyramid) when compared to most British cities and to the UK as a whole. In fact, it is an exception to the declining fertility rates of recent decades that typically produce a population profile with a lower proportion of young residents, as seen in the majority of Western cities.

Indeed, Bradford not only has the highest proportion of residents under the age of 18 of any city in the UK, but it has also a lower proportion of residents in all age groups over 45 when compared to the UK.

An analysis of Bradford's overall population trends reveals that, despite its young population profile (usually related to high population growth), its population growth rate is declining. Although still positive (Bradford's population is increasing every year), the overall rate of population growth between 2010 and 2015 was only 2.6%, well below the national average of around 4% for the same period. This also appears to be a relatively recent phenomenon, as population growth in Bradford for the period 2005-10 was still running above the UK average.

And many young adults are leaving, but if retained offer economic benefit

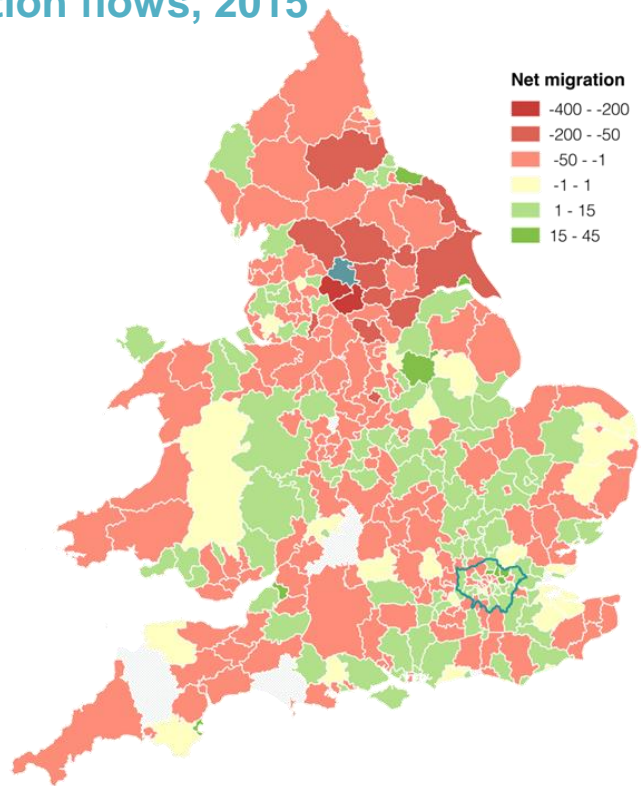
Figure 4 – Bradford net migration flows, 2015

Internal migration

Age group	Inflow	Outflow	Net migration
Under 18	2,762	3,268	-506
18 to 20	1,210	2,083	-873
21 to 25	2,757	2,751	6
26 to 34	2,817	3,414	-597
35 to 44	1,822	2,142	-320
45 to 54	1,166	1,460	-294
55 to 64	868	989	-121
65plus	908	1,065	-157
Total	14,310	17,172	-2,862

International migration

Inflow	Outflow	Net migration
4,501	2,047	2,454



Source: Metro Dynamics analysis of ONS and Ordnance Survey data

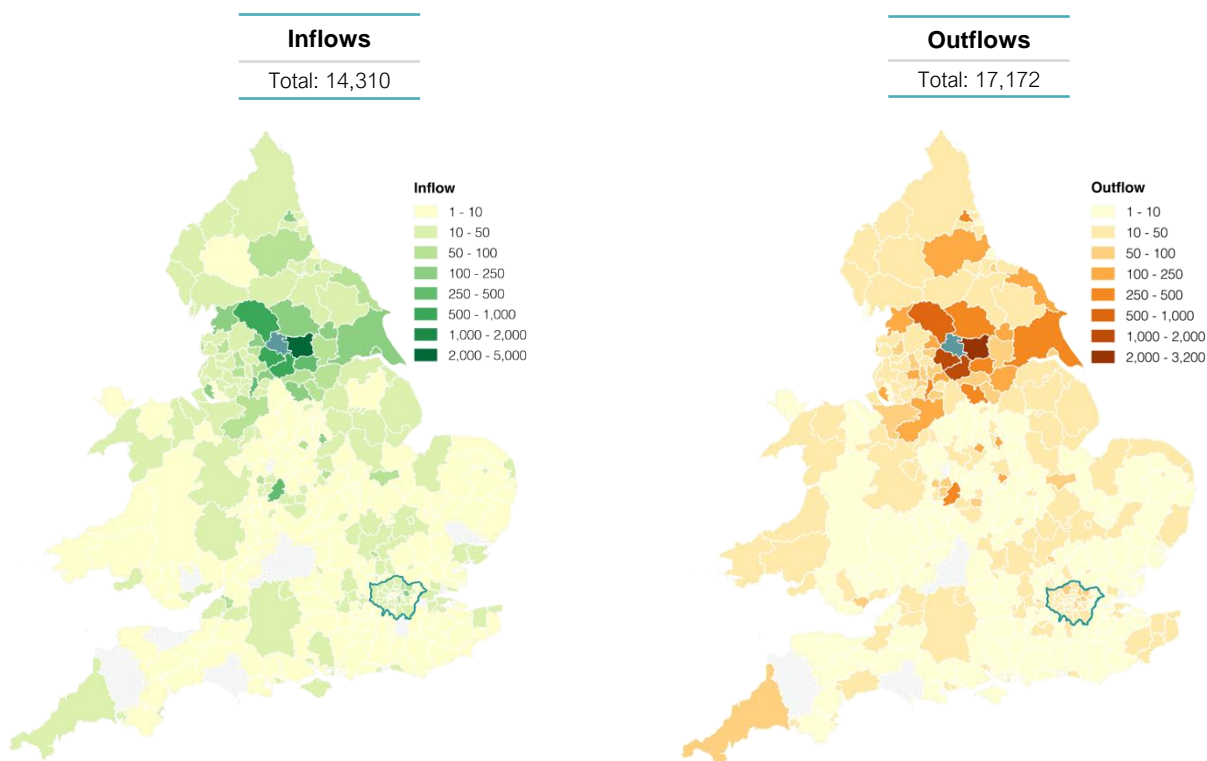
Migration is another important factor influencing Bradford's population change. The tables and map above show internal and external migration figures for the district. Internal migration depicts the total number of residents who moved into Bradford from elsewhere in the UK (inflows), as well as the number of residents who moved out of Bradford to other UK districts (outflows), by different age groups.

The map shows the net internal migration (inflows-outflows) to and from all other districts in England and Wales (red areas representing a net outflow and green areas a net inflow). Finally, a table of international migration provides data on residents who moved into Bradford from abroad during 2015, and those who left Bradford to live outside the UK.

Bradford is losing people across almost every age group, with particular emphasis on younger cohorts. With a net outflow of 873 18-20 year olds, Bradford differs from the profile expected of a UK university city. In total, Bradford lost over 2,800 residents to other areas of the UK during 2015, particularly to neighbouring districts and other northern locations.

This net loss was almost compensated for by a net positive international migration flow of 2,454 new residents in the same year. If international migration is clearly playing an important role in keeping Bradford's population growth steady, the high numbers of in and out migration of international residents – presumably at different life stages – might also provide an explanation for the atypical population pyramid we observe.

Figure 5 – Bradford internal migration origins and destinations, 2015



Source: Metro Dynamics analysis of ONS and Ordnance Survey data

The maps above show the total number of people who moved to Bradford (in green) and who moved from Bradford (in orange) during the year 2015. The strongest connections are most clearly with Leeds and other northern cities, rather than London. There are also a considerable number of Bradford residents moving to the West Midlands, particularly to Birmingham and Coventry.

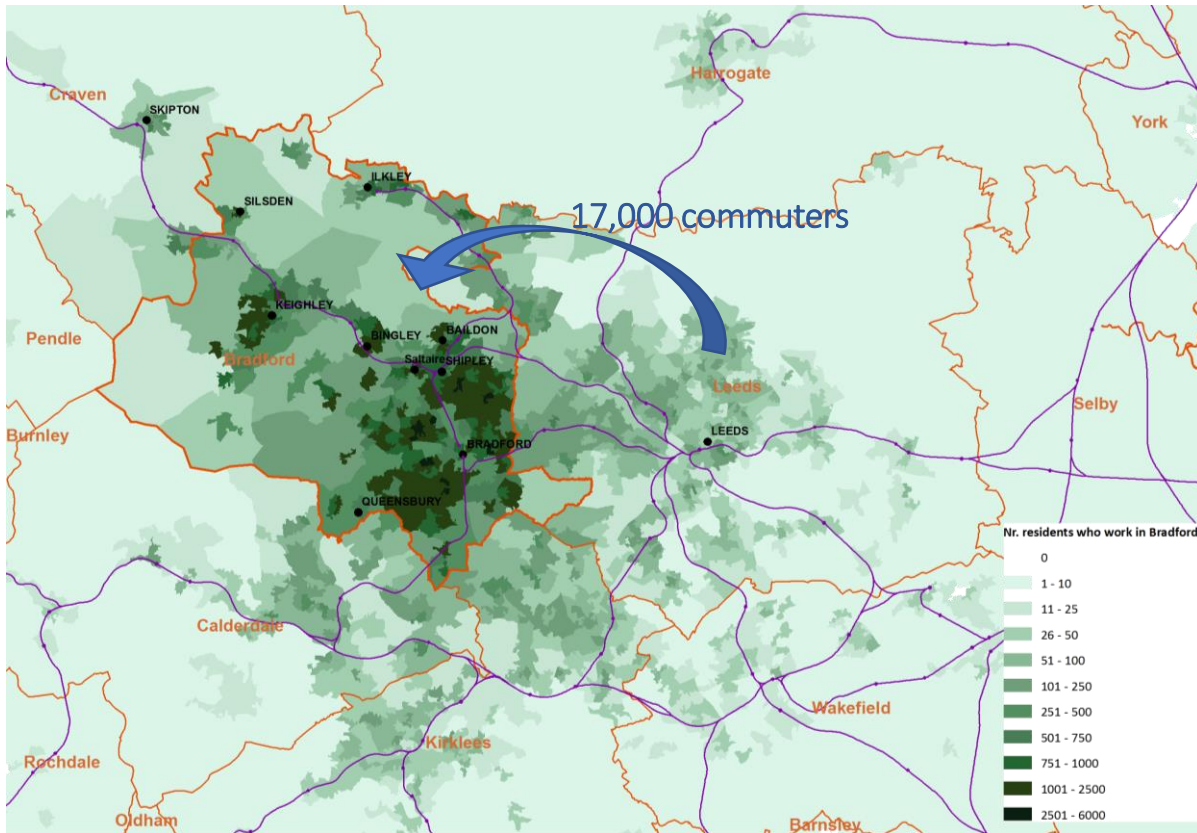
It appears that population change in Bradford has been driven by natural population growth and by international immigration. Bradford loses more people to UK migration than it gains. Should international migration into Bradford slow down (either as a result of Brexit or changes to UK migration policy) there is a risk that Bradford will experience a population decline in the medium term.

The reasons are twofold. On the one hand, natural population growth is the result of considerably higher than average fertility rates in recent years (e.g. in 2015, the general fertility rate in Bradford was 74.8 compared with 62.5 in England). Although these figures are likely to have an ethnic dimension given Bradford's significant Asian population, there is a natural trend in advanced economies for fertility rates to decline with changing household arrangements and the increasing economic participation of women. On the other hand, the evolution of international migration flows is always unpredictable. They depend on several hard-to-control factors such as immigration policies, external perceptions of the UK or events taking place overseas. Moreover, the recent decision of the UK to leave the EU adds to this uncertainty.

The opportunity for Bradford is to capitalise on what the evidence shows - that there are many young people in the area who, when the time comes, make the decision to move to nearby areas. By retaining and attracting more of these economically valuable young residents and developing and promoting the right employment and residential offer, Bradford has the potential to reverse patterns of population change, thereby bringing economic benefits to the entire district.

Bradford's workforce is self-contained, but Leeds attracts many residents

Figure 6 – Where Bradford workers live



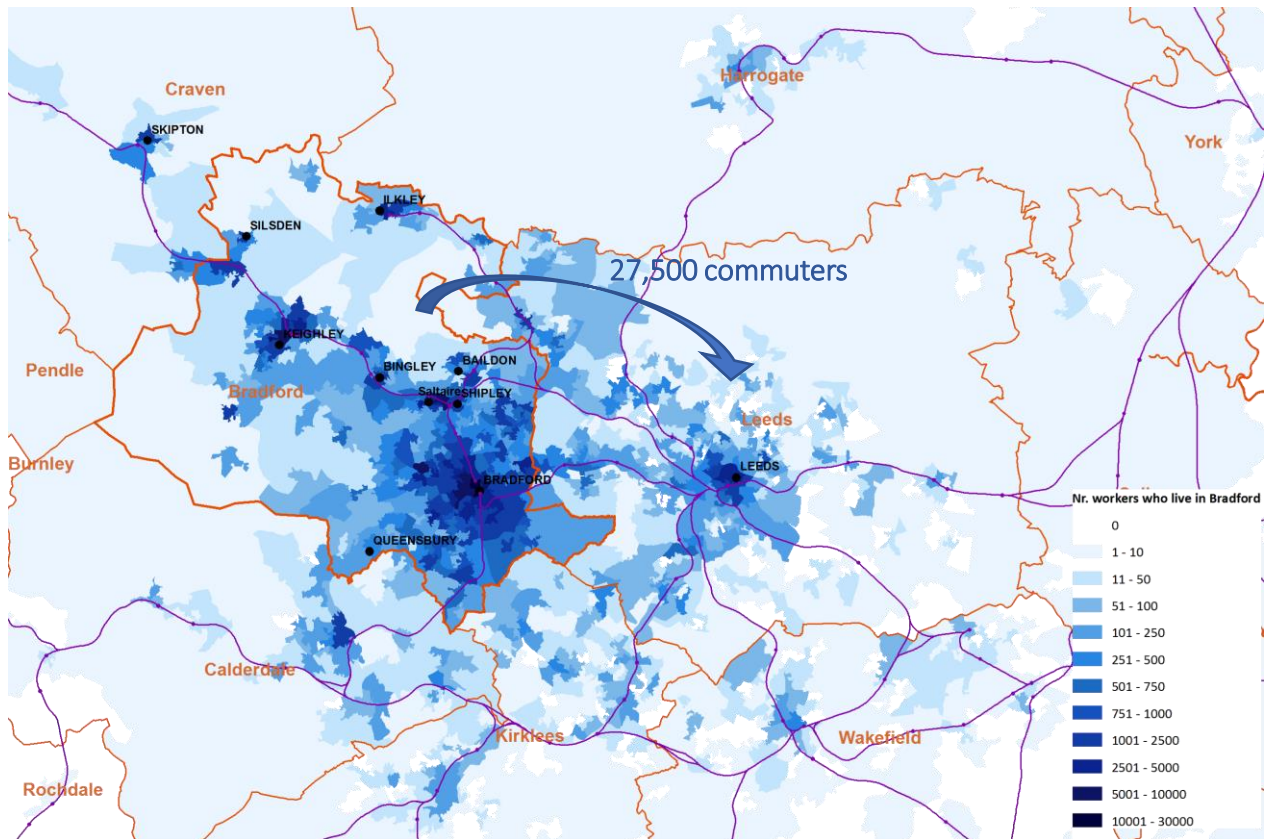
Source: Metro Dynamics analysis of Census 2011 and Ordnance survey data

An analysis of Bradford's daily commuting flows provides a valuable insight into the functional role of the city region. Figure 6 shows where people who work within Bradford District travel from. The darker areas show the majority of people who work in Bradford also live in Bradford (72%).

Of Bradford's workplace population, 17,000 live in the Leeds region, particularly in areas close to their boundary. This accounts for over one third of all Bradford's commuting inflows, with Kirklees (9,000 commuters) and Calderdale (8,000 commuters) also acting as important residential clusters for Bradford's workforce.

When considering where Bradford's residents commute to, the picture is slightly different (figure 7). Self-containment is much lower, with Leeds the most popular of external destinations. 70% of Bradford's residents also work in the district, but Leeds attracts significant numbers of Bradford's working population: 27,500 daily commuters, roughly half of all Bradford residents who work outside the district.

Leeds is a very important working destination for Bradford residents, particularly in areas around the city centre. Bradford's city centre is an even more dominant destination for the district's residents. Other important employment centres include Keighley, Bingley, Shipley and Saltaire, and Steeton and Silsden.

Figure 7 – Where Bradford residents work

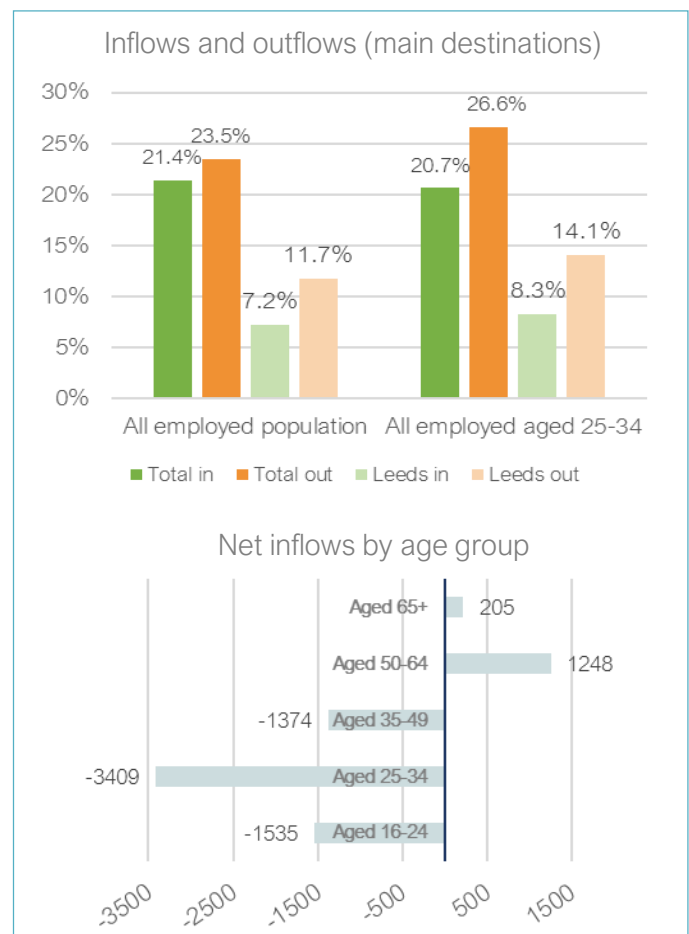
Source: Metro Dynamics analysis of Census 2011 and Ordnance survey data

Figure 8 – Commuting flows

Bradford commuting patterns can be characterized by a relatively high self-containment of the district's workforce, and by a strong functional relationship with Leeds. This relationship is more dominant in one direction, with Bradford residents working in Leeds in greater numbers than vice versa.

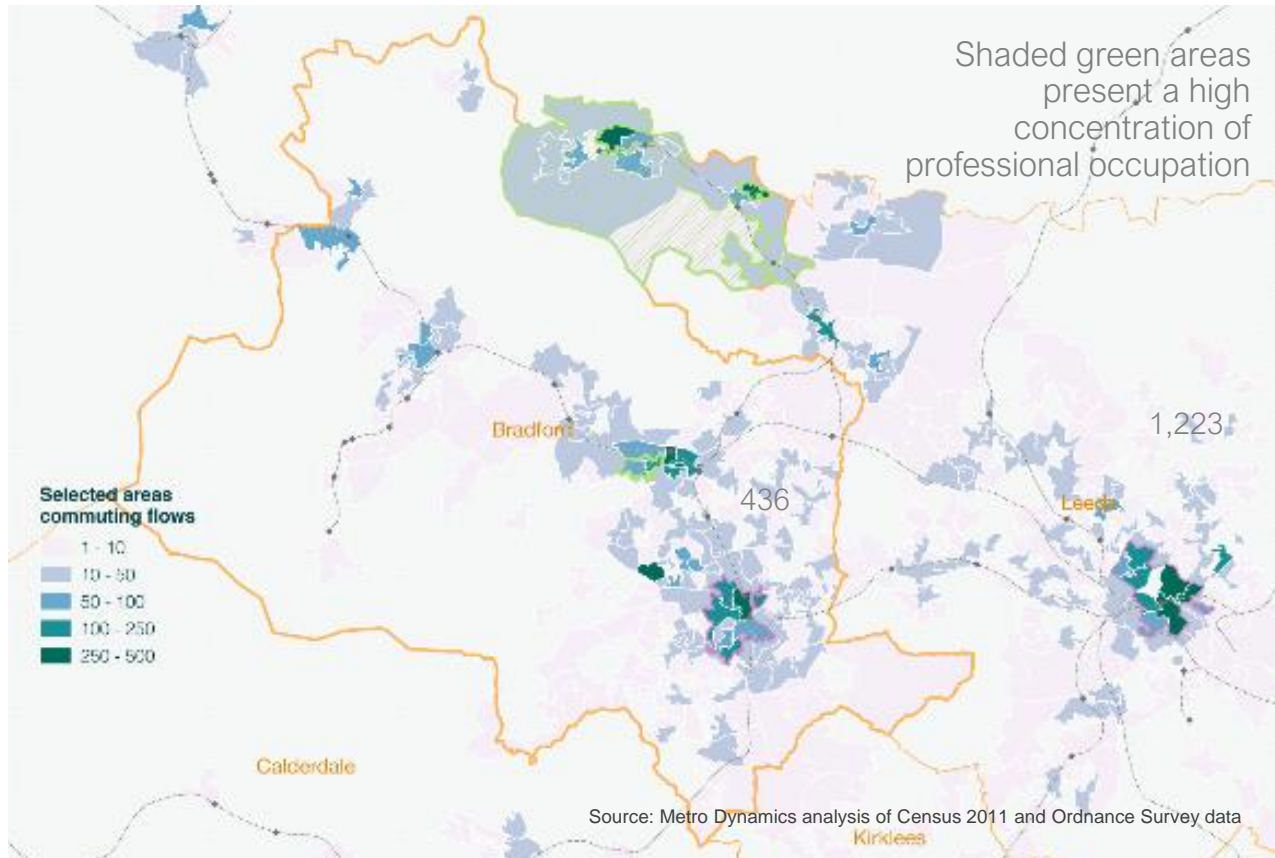
An investigation of the age of commuters reveals further important differences (figure 8). Daily outflows are overall higher than inflows, but the difference is considerably higher for young commuters (25-34). Commuting patterns to Leeds – the main destination for this group – follow the same trend, but with a higher proportional difference between outflows and inflows, corroborating the one-way trend identified above.

The lower chart confirms the age gap in commuting, with a positive net inflow of workers older than 50 to Bradford, but a net loss of commuters in all other age groups. Most notably, there is a daily net loss of over 3,400 Bradford residents aged 25-34 who work outside the district.



There are synergies between Bradford and Leeds to build on

Figure 9 – Workplace of Bradford residents in areas of predominantly professional occupations



The significant levels of commuting from Bradford to Leeds are employment related and demonstrate the attraction of a strong service economy. Leeds is particularly attractive to young qualified professionals working in high end (non-managerial) occupations. Figure 9 examines this hypothesis. It identifies the areas in Bradford with the highest proportions of residents in professional jobs (shaded in green on the map above). It then maps their work destinations.

Bradford's residents working in professional occupations live mainly in the northeast of the district (between Menston and Ilkley) and in Saltaire. According to property analysis presented later, these are two of the most sought after and least affordable areas in Bradford. Although many residents in these areas work locally, the centre of Leeds is their main destination (1,223 daily commuters), followed by Bradford's city centre (436).

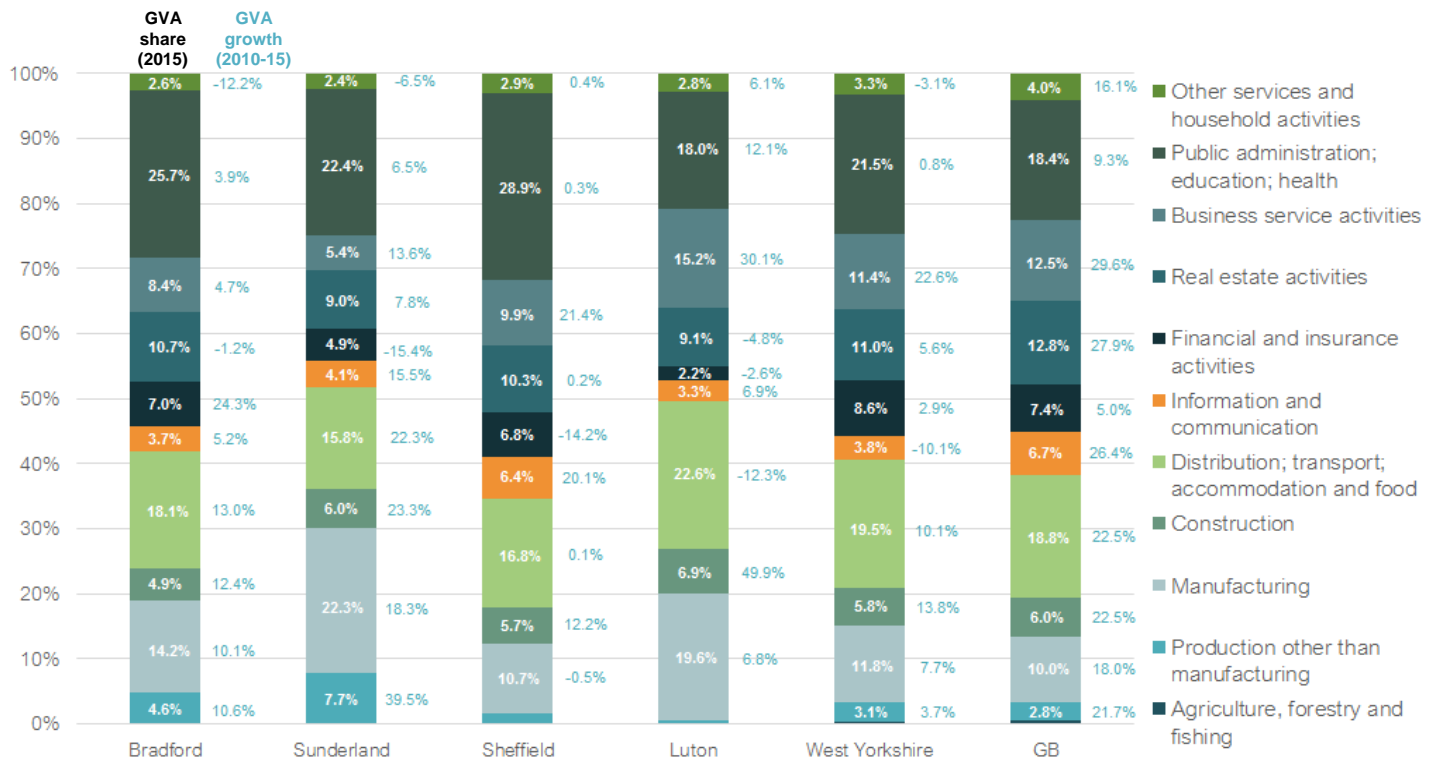
Two primary conclusions arise. First, the vast majority of Bradford's workers choose to live locally. Second, there is a strong functional relationship between Leeds and Bradford. This is typified by high flows of young qualified Bradford residents working in Leeds, many in the large global and UK consulting, accounting, insurance and financial services sector companies with presence there.

While Leeds has attracted these companies and their related high-levels of productivity and jobs, Bradford has not. Behind this multiple current and historic factors are at play but the analysis shows that a number of areas of Bradford have successful in attracting many of these workers as residents. In this respect, Bradford and Leeds appear to be increasingly complementary to one another.

The opportunity for Bradford is to build on this synergy and move towards agglomeration with Leeds by attracting more residents, particularly young professionals, who may, initially at least, commute to Leeds. And as Bradford attracts new skills, it can also attract businesses and their jobs. This emphasises the importance of a strong housing offer in the right locations for selected life-stage groups, complemented by access to an expanded, efficient and regular rail network that facilitates commuting. Realising potential agglomeration impacts is key to developing business cases that will attract investment.

Bradford's economy is growing in some sectors but holds potential to be stronger

Figure 10 – GVA growth by industry between 2010 and 2015



Source: Metro Dynamics analysis of ONS data

Bradford's economy is showing growth in most industrial sectors but levels are below those of comparable areas and national averages. The exception is financial services and insurance activities, which have experienced growth of 24.3%, well above the national level of 5.2% for 2010 to 2015. Financial services remains strong following the sale of Bradford & Bingley and the subsequent growth of companies such as Provident Financial Group, with its prominent HQ building in the city centre.

Evidence of Bradford's strength as a Producer City appears to reside in the proportionally larger manufacturing and production sectors. The growth of the latter is less than half of the GB average of 21.7%. Manufacturing is reasonably strong with an overall proportion of GVA at 14.2% but with growth at 10.1% compared to the GB average of 18.0% there must be concerns of continuing to be overly reliant on it. Distribution and food are performing better than many comparable locations such as Sheffield and Sunderland, and this can be traced back to highly successful companies producing pre-packaged foods such as sandwiches and Asian ready meals.

Public services also forms a significant proportion of the economy at 25.7% of GVA. This is rarely a rapid growth sector, nor one that provides significant productive outputs. Even so, its growth is below national levels and it will face further challenges with the continued pressure on public sector spending and the planned move of HMRC offices out of the city to Leeds. In addition, real estate GVA, a marker for the prosperity of many UK regional economies, stands at 10.7%, having declined by 1.2%.

The potential for Bradford is to use its industrial heritage, knowledge and reputation as a Producer City and industrial innovator as foundations to attract and develop new sectors and companies. This can distinguish it from its neighbours and potentially draw a new generation of entrepreneurs and business leaders who can take advantage of growing communities of young professional workers and desirable, available and affordable industrial and office space.

And has sectoral specialisms thanks to multinational firms and sophisticated supply chains

Figure 11 – Bradford Location Quotients and selected companies, 2015

7.71	36 : Water collection, treatment and supply
4.64	13 : Manufacture of textiles
3.15	20 : Manufacture of chemicals and chemical products
2.62	18 : Printing and reproduction of recorded media
2.51	31 : Manufacture of furniture
2.40	58 : Publishing activities
2.30	11 : Manufacture of beverages
2.26	37 : Sewerage
2.09	28 : Manufacture of machinery and equipment
1.97	64 : Financial service activities, except insurance and pension funding
1.91	10 : Manufacture of food products
1.90	17 : Manufacture of paper and paper products
1.70	22 : Manufacture of rubber and plastic products
1.58	29 : Manufacture of motor vehicles, trailers and semi-trailers
1.49	88 : Social work activities without accommodation
1.48	23 : Manufacture of other non-metallic mineral products
1.37	85 : Education
1.32	26 : Manufacture of computer, electronic and optical products



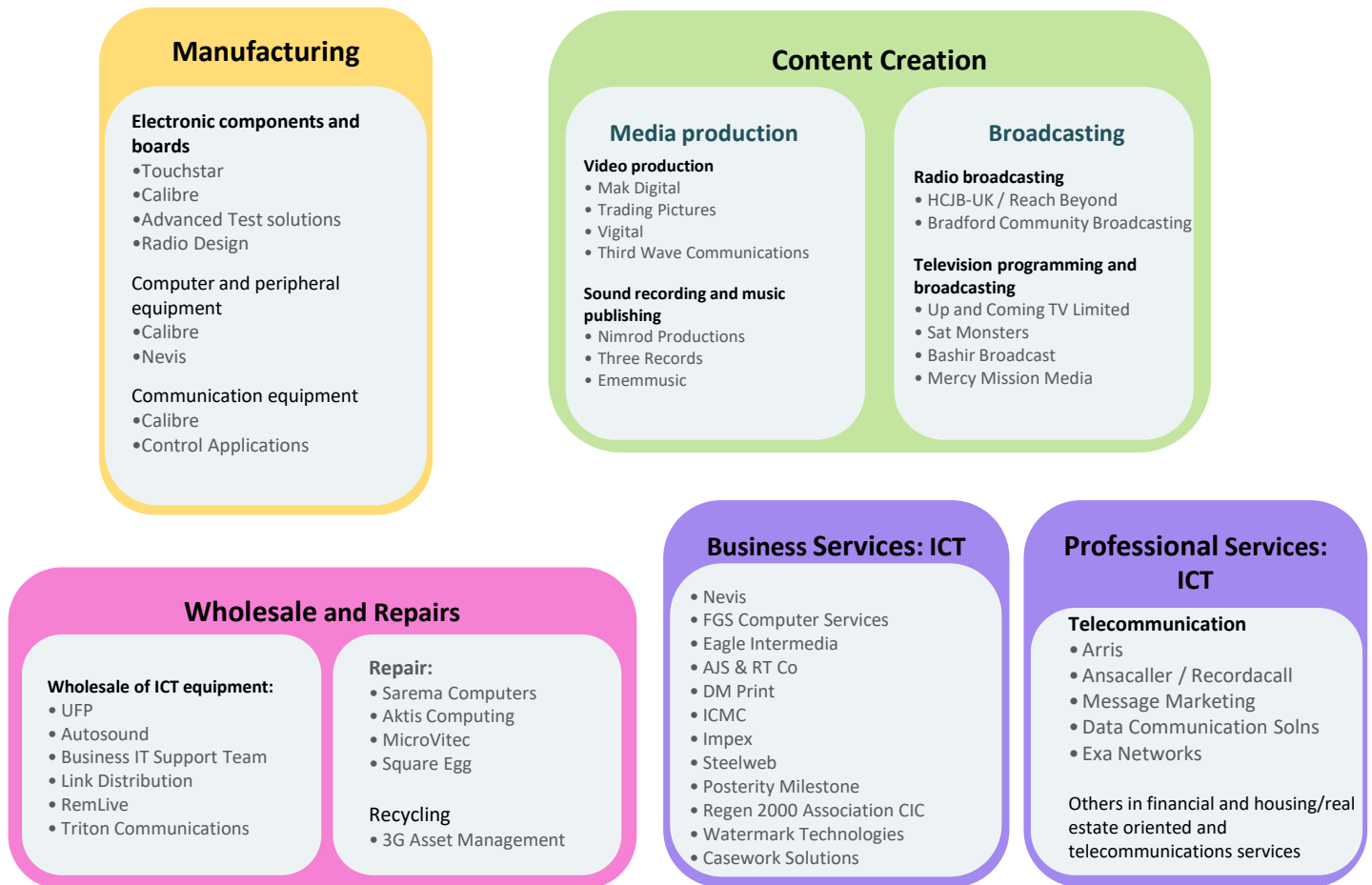
Source: Metro Dynamics analysis of ONS data

The table above provides the Location Quotients for Bradford relative to Great Britain as a whole. The higher up the scale, the greater the relative number of employees and therefore concentration and strength relative to the rest of the country. The table reveals some strengths and weaknesses in Bradford's economy:

- Water collection, treatment and supply is the sector with the highest concentration relative to the rest of the county. As well as being a major economic contributor, Yorkshire Water is also a major employer for the region, capitalising on the terrain and natural resources.
- Manufacture of textiles, an industry in decline in the UK, has an LQ of 4.54 and is a continued strength. An analysis of companies reveals many with a long local heritage now moving up the value chain to focus on higher quality and finishing products, as well as establishing stronger international trading networks. Examples include Holmfirth Dyers and Thomas B Ramsden, who export to Italy, Central Europe and the Far East.
- Many multinationals are located in the district and as major employers make significant contributions to the specialisation of industries locally. Examples and related sectors include Princes and Farmers Boy for food, Nufarm for agrochemicals, Hallmark for publishing and Arris for manufacture of computer equipment. Many are part of sophisticated supply chains and are located in Bradford for reasons of history, access to workforce, space and distribution networks.
- Social work activities are also significant with a growing base around residential care homes, related properties, social care and rehabilitation. Examples of strong local companies with multiple assets and holdings across the district include Victorguard Ltd, BCHT Development and P & B Kennedy Holdings.

Common themes linking many of the successful companies shown above include their role as traditional employers as part of a Producer City economy. Furthermore, they are participants in sophisticated international supply chains, having established international sales networks and export markets to ensure their continued prosperity.

Figure 12 – Areas of the emerging ‘new economy’



A further, more detailed, investigation of newly registered Bradford companies via Companies House and Location Quotients reveals a number of additional sectors. While Bradford's core economy has maintained its manufacturing base, largely borne of the textile sector, new clusters of businesses are appearing that offer potential green shoots for future growth as highly productive and innovative industries of a new economy. These are shown in the diagram above and include manufacturing (of electronic and computing components), wholesale, content creation, business services and professional services and particularly in areas of new media and telecoms.

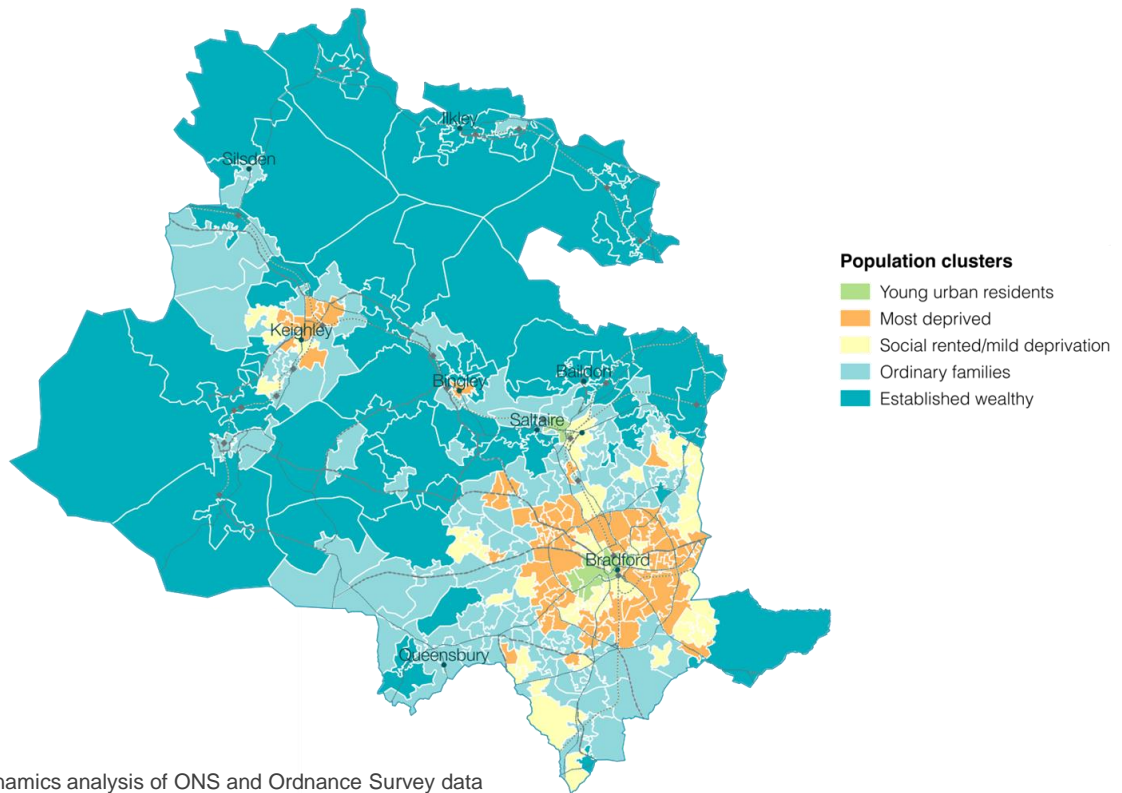
Developing and scaling niche sectors is challenging but crucial. One approach is to capitalise on expertise within successful local manufacturing companies such as creating international trade networks, efficient management of supply chains and methods to add value. By making these connections, Bradford has an opportunity to turn emerging sectors into the future primary employers.

Sectors such as media production, video and broadcasting and gaming hold potential for international markets and may also provide an opportunity to capitalise on Bradford residents language expertise. Bradford's residents are well positioned to create new cutting edge media technologies across a range of languages and use existing trade links to sell abroad.

The telecommunications sector is a further example – local companies such as Arris are already successfully competing in global markets. Their success can be replicated by other companies if they are supported in breaking into geographical markets currently out of reach.

There is a group of ‘young wealth creators’, who should be encouraged

Figure 13 – Socio-economic classifications



Source: Metro Dynamics analysis of ONS and Ordnance Survey data

The map above is an analysis of Bradford's population clusters generated from a series of over 35 demographic and economic variables processed through specialist algorithms to identify predominant socio-economic groups across the district. The map shows the most deprived communities highly concentrated in the area surrounding Bradford, with more established clusters in the less accessible and more remote locations away from the main town and city centres.

While Bradford has clear challenges with deprived and mixed communities, it also holds an area with a high concentration of Young Urban Residents - an area extending from the centre of the city to the west and comprised of a number of co-terminus LSOAs. Similarly, a group also appears in Saltaire with a smaller pocket in Keighley. Young Urban Residents are sought after as an ingredient for growth in places and cities around the world. They are commonly highly mobile, qualified, 25-34 year olds and are known for creating the jobs of tomorrow and enabling future wealth.

Their potential for substantive transformative change means they are a group who should be encouraged to develop and grow as a source of future growth. However the growth of these communities is rarely spontaneous. Cities need to support them and ensure they evolve to become fully fledged Young Wealth Creators who draw in additional investment and enable the district to become self-sufficient.

Bradford appears to hold many of the attributes that can be used to capitalise on and grow these communities – the physical environment is just one example – Bradford’s numerous under-utilised heritage and historic buildings that define its city-scape would be the envy of many other highly successful European cities.

In addition to the physical environment, YURs seek social networks, peer groups, restaurants, housing stock, investors and transport links. Often they are situated close to a successful university but there are additional means by which Bradford could encourage them. Examples include:

- Consideration of the housing stock close to the centre. Mixed use neighbourhoods and the right design of property can be as vital as location, i.e. close to restaurants, bars, shops, offices, research space and studios. Bradford has this potential in abundance and in close proximity to the centre. With the right investment and plans for specific sites, Bradford has the potential to become a genuine magnet.
- City centre design can be critical and may require thought. The success of the Centenary Square and mirror pool developments in the context of the City Hall are an indicator as to what can be achieved.
- Cities nurture new ideas – the culture and heritage of cities, mix of residents, academic assets, investment community and physical cityscape can all positively contribute to innovation.
- Leverage academic institutions. Bradford does have successful academic institutions and finding ways to encourage graduates to remain in the district would be invaluable in growing communities of young urban renters.
- Public funds commonly used to leverage and support areas. If Bradford can continue to make investments itself as with Centenary Square and help shape business models for investors then investment of public money will draw in investment of private funds. External funds and investors will become easier to attract and engage in the process of invigoration of the development of the city.

Locations of YURs are co-terminus with high rates of business creation in high value sectors

Figure 14 – Bradford new businesses (created between May 2016 and April 2017)

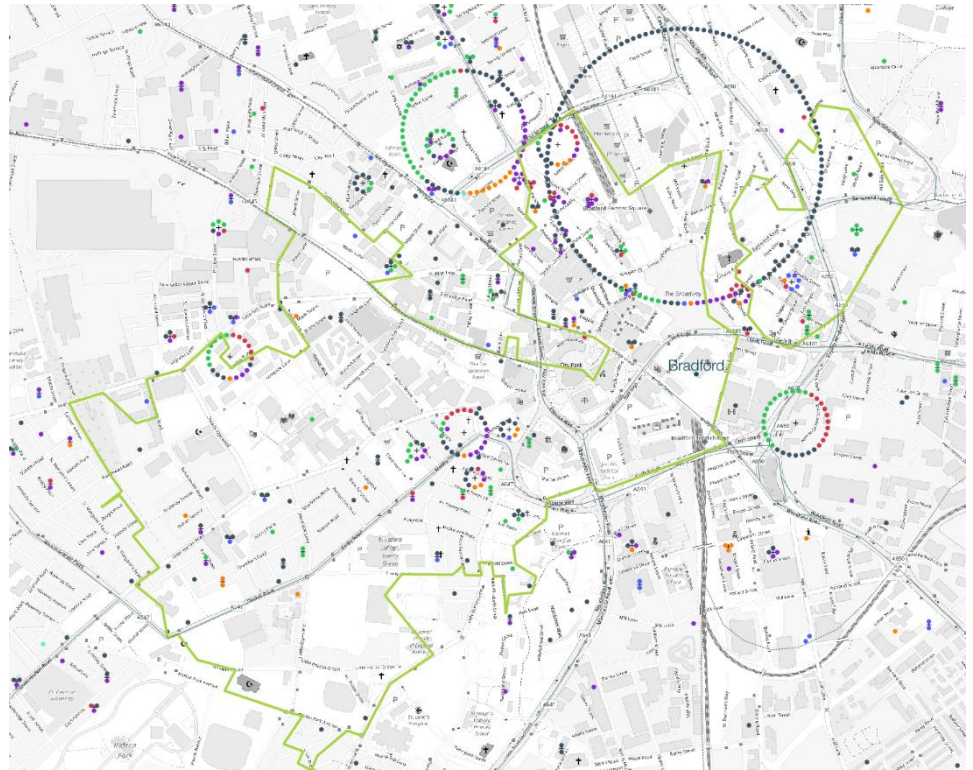
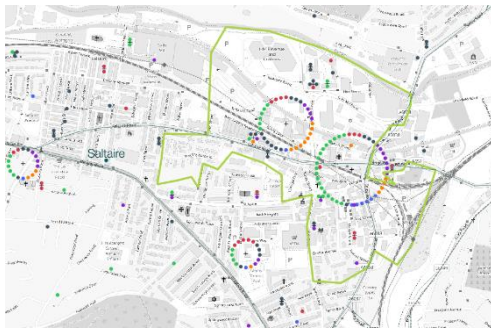
City Centre YUR Cluster

Businesses with sector known in YUR clusters: 452

Sectors

0 %	ABDE - Energy and Water
5.09 %	C - Manufacturing
7.74 %	F - Construction
12.17 %	G - Wholesale and Retail
8.41 %	JKL - Finance, Property and I&C
17.48 %	MN - Business Services
49.12 %	All other services

Saltaire YUR Cluster



Source: Metro Dynamics analysis of Banksearch and City of Bradford MDC data

The map above shows the areas with a higher density of Young Urban Residents, outlined in green. Overlaid on it are circles, the centres of which are the postcode locations of addresses of new business registrations. The size of the circles represents the number of businesses registered at these locations between May 2016 and April 2017

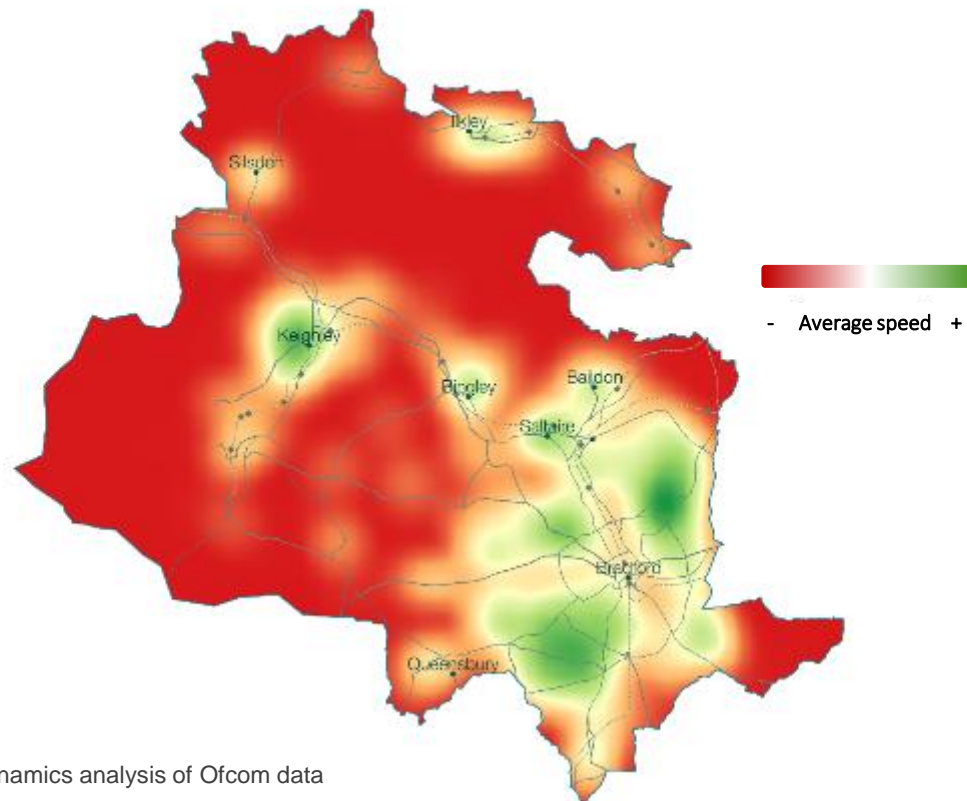
The analysis reveals that the locations with higher proportions of YURs in both Saltaire and Bradford are coincident with some of the highest rates of new business creation anywhere in the district. These locations can be considered synonymous with young entrepreneurs.

In 2016 over 1000 new businesses were created with the most significant business sector recorded as Business Services, which is positive as Business Services are under-represented in Bradford (as illustrated on page 16) despite the fact it is the fastest growing sector in the UK.

Retaining YURs and supporting them to become wealth creators alongside enabling these geographic areas to expand and thrive is as vital for Bradford as it is for any other city. It will therefore be crucial to learn more about these residents and these sectors and what these businesses require to succeed. Ensuring they move from start-up to fledgling businesses, and then on to major employers, is vital to renewing more deprived areas and increasing employment and skills.

To maintain Young Wealth Creators and their new businesses, key infrastructure like Broadband speeds, road and rail are required

Figure 15 – Broadband heat-map



Source: Metro Dynamics analysis of Ofcom data

For YURs and businesses to remain in or be attracted to a location, it is vital that the necessary infrastructure is available. This includes digital infrastructure as well as road and rail transport infrastructure to connect to neighbouring towns and cities.

The broadband picture for Bradford is mixed, especially when compared to other cities in the UK. Network speeds closest to the city centre are well below average speed. Some of the highest levels of connectivity are in residential areas. Interestingly, the locations of YUR clusters match locations of better connectivity, but connectivity will need to be further developed if Bradford is to grow these communities.

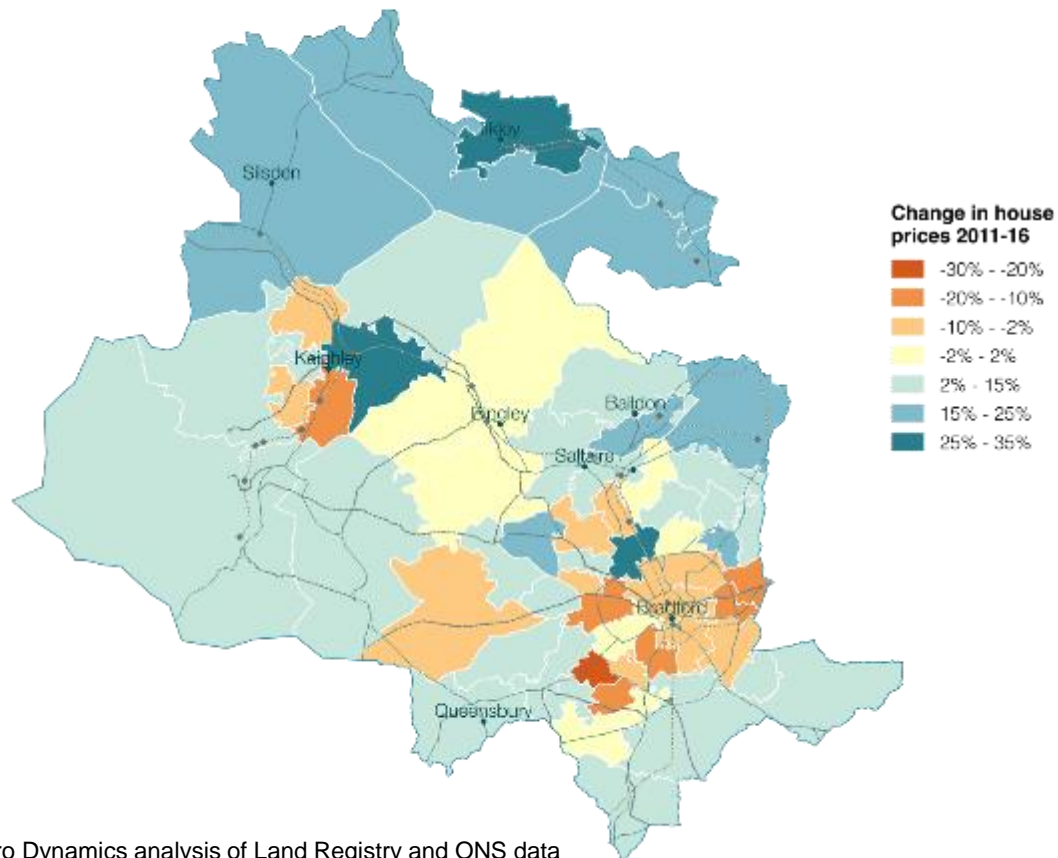
Initiatives such as the DarkLight <https://darklight.city/cities/bradford-gigabit/> use of the underground sewer network to reduce the cost of cabling installation are beginning to have an impact. If encouraged, such initiatives can help differentiate Bradford and make the city an easier choice for businesses.

Similarly crucial is the rail infrastructure to support an increase in commuter flows and other passengers, especially between Leeds and Bradford. The value of the rail network to Bradford in terms of commuting and enabling communities to grow has been evident throughout this analysis. Encouraging its further development would certainly contribute to Bradford's growth.

Changes such as increasing the length of platforms (and with it the length of trains), improving rolling stock quality and frequency of services has the potential to increase the accessibility of Bradford and towns and villages along the rail line, as well as their attractiveness as places to live.

The decline in Bradford residential property prices is counter to trends but offers affordability

Figure 16 – Change in house prices, 2011-16



Source: Metro Dynamics analysis of Land Registry and ONS data

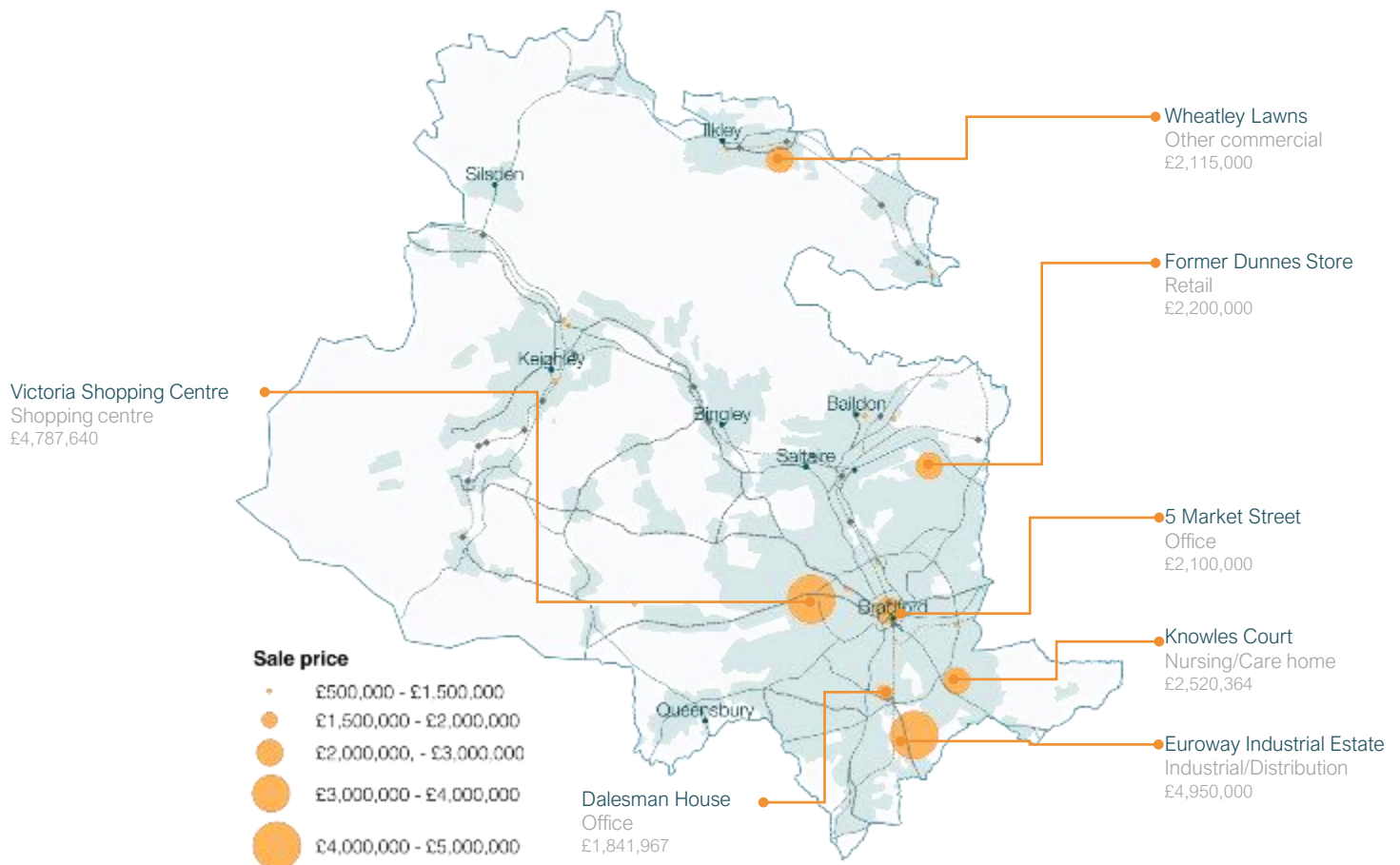
An analysis of changes in property prices between 2011 and 2016 reinforces the variations in patterns of prosperity previously identified in this study. First and foremost, the map above reveals a pattern of a widening gap in property prices, with many areas of low house prices, particularly close to the centre of Bradford, experiencing decreases, in contrast to those with already higher house prices, for example in the north around Ilkley, with prices showing further increases.

While there have been property price increases in the district of up to 30%, these are not high in comparison to the national trend in the same period, which for some parts of the country is more than 300%. While this is an indicator of some challenges in the real estate sector, it is also an opportunity for Bradford to attract residents who will best support the growth of the city, by increasing house affordability. In the majority of locations, there is a consistent coincidence of higher house prices and rail network accessibility. An important exception is Bradford's city centre, which has high connectivity but low property prices.

The centre of Bradford shows the greatest falls in house prices from 2011 to 2016, with the highest levels in the south west of the city. As previously noted, a physical review of the city shows there are many significant vacant spaces and buildings that, if developed, could meet market needs, bring the population closer to the centre, increase desirability and reverse the decline in house prices.

The volume and value of commercial property transactions is low but also offers opportunity

Figure 17 – Large commercial property transactions, 2016



Source: Metro Dynamics analysis of EGi and Ordnance Survey data

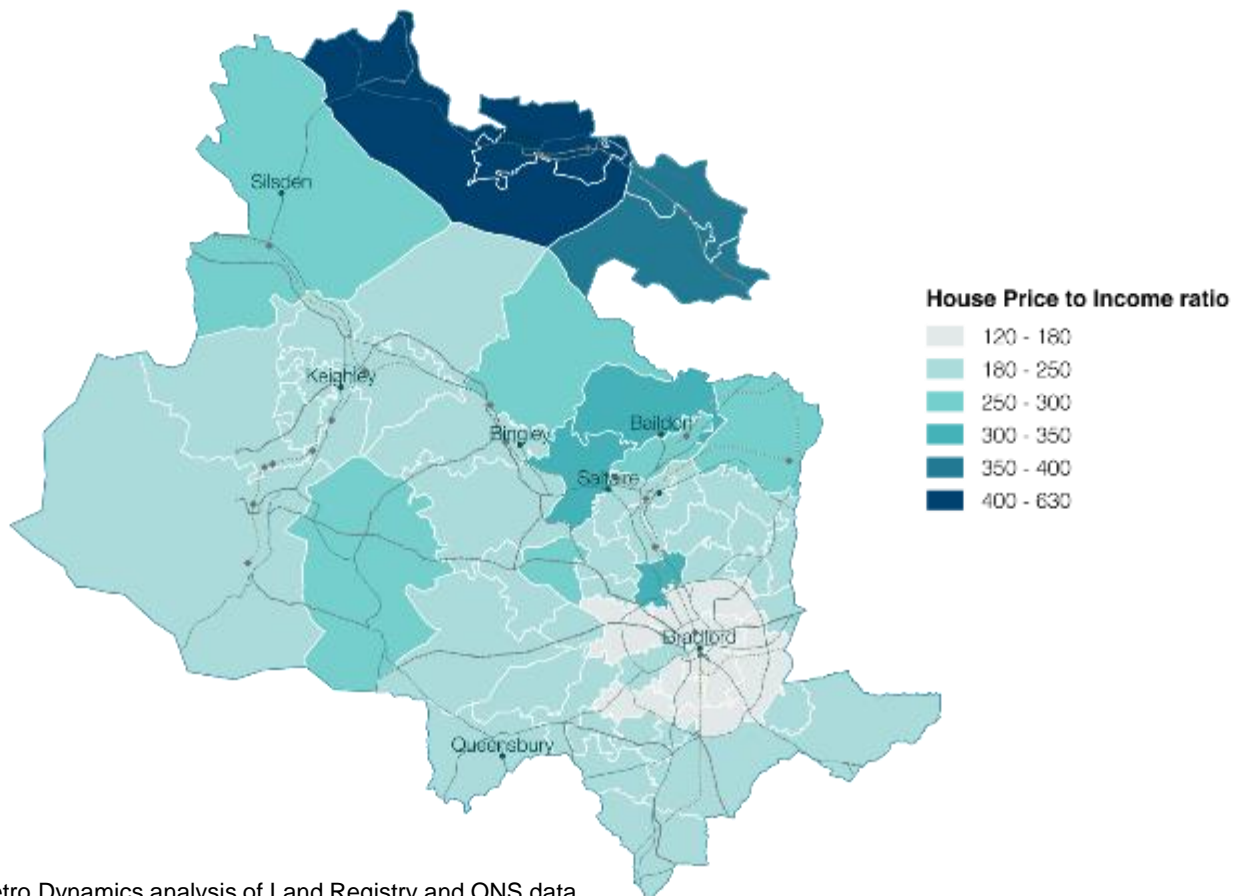
Bradford's commercial property sales above £500,000 during 2016 are shown in the map above. As with the residential market, they show a mixed picture. The largest transactions are to the west and south of the city of Bradford and all are close to road and rail links. The most significant are distribution in the Euroway Industrial Estate at almost £5m with an investment purchase by Capital Catalyst for a 144,000 sq.ft unit – a site recognised as having large units and strong connectivity with the motorway network. The second most significant is the Victoria Shopping Centre at £4.8m for a 74,000 sq.ft retail site.

Compared to many other parts of the country, including other northern cities, the volume and value of commercial property transactions is low. A physical review of the volume of space in the city centre itself reveals that there are considerable areas available, with many very significant old buildings and sites close the centre unused or derelict.

As with residential property, this points to potential affordability of commercial property for a range of business types in locations with good transport and infrastructure connections. By considering the proposition, location and status of specific sites and their potential value to industry sectors and financial investors, the district could generate significant potential to attract companies, new residents and increase employment.

Which means Bradford city centre and many other parts of the district are highly affordable

Figure 18 – Housing affordability, 2016



Source: Metro Dynamics analysis of Land Registry and ONS data

Taking a closer look at residential property compared with income confirms affordability levels within the city centre and mirrors the pattern of house price change. To the north of the region around Ilkley, properties are highly valuable and desirable due to their access to open space and direct rail access to Leeds as well as Bradford and also Saltaire. This is the least affordable housing in the district.

For most of the area outside the city, affordability levels are generally consistently relatively low, while the city centre itself, particularly the area within the ring-road, could be considered highly affordable. The exception is the area identified above as being occupied by Young Urban Residents from the centre to the west. This appears less affordable, likely influenced by the greater desirability of the area, which has pushed prices up.

This analysis further reinforces the opportunity presented by property affordability in Bradford. The right types of property in the right locations to attract the working population and skills required by businesses is a genuine opportunity for the growth and prosperity of the district. Finding ways to drive interest and grow demand will be crucial.

There are important skills gaps both at the top and bottom of the labour market

Figure 19 – Qualification levels of residents: Bradford and comparators, 2016

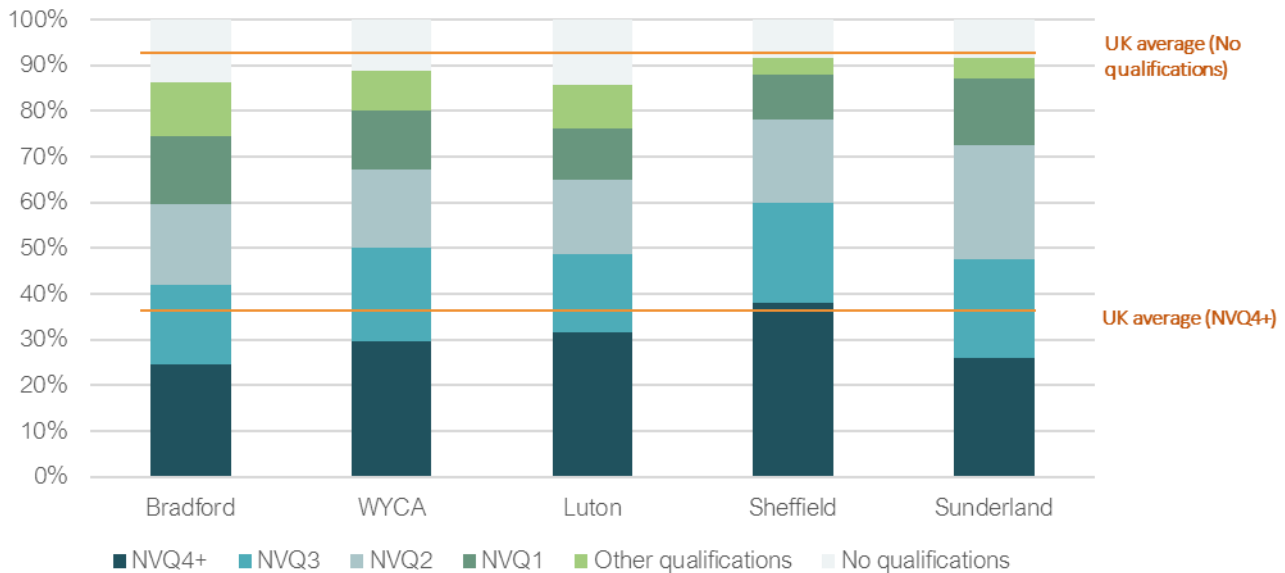


Figure 20 – Student attainment in Bradford, 2015/16

GCSE and A-level

5+ A*-C grades including English and mathematics GCSEs

Percentage of students achieving AAB or better at A level

Bradford

46.2

18.6

England

53.5

22.1

Source: Metro Dynamics analysis of DfE data

Figure 19 above shows the qualification profile of Bradford and four other comparators. It plots the distribution of total population aged 16-64 by their highest qualification degree, from NVQ4+ (further or higher education) to No qualifications. Bradford is underperforming relative to comparators on both ends of the spectrum: it has 14% of its working age population with no qualifications – somewhat above UK average of 8.3% – and just less than 25% with a further or higher education degree, quite below most comparator cities and the UK average of 37%.

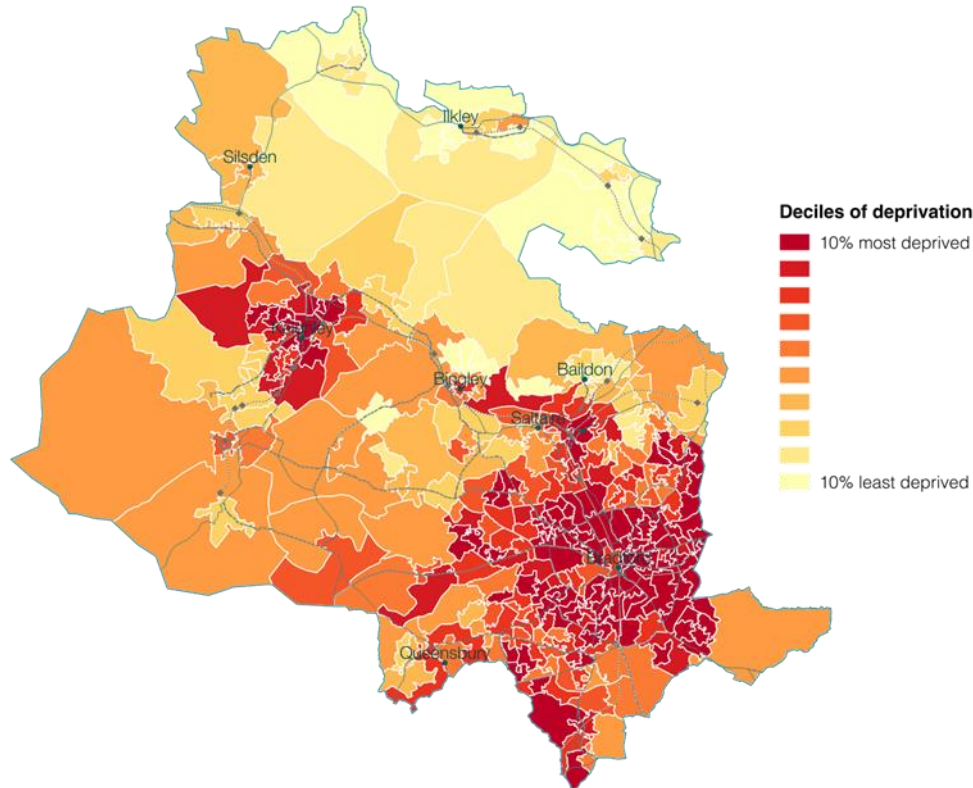
This suggests that Bradford has a skills gap at the top and bottom of the labour market, with a high proportion of mid-skilled residents. This can put Bradford at economic and social risk in the medium term, as evidence suggests that mid-skilled jobs are most affected by structural change, such as globalisation, technological change and automation. This might result in an increase in unemployment and lower value jobs, as well as in lower GVA growth.

Improving university student retention would therefore be important not only to decrease the levels of outmigration of young residents, but also to increase the qualification profile, which is clearly lacking in residents with a university degree.

The performance of Bradford's school students is also below the average for England. Figure 20 shows that only 46.2% of Bradford's students achieve 5 or more A*-C grades on their GCSE exams, compared to 53.5% of English pupils overall. The picture is similar for A-level performance, with 18.6% of Bradford students achieving grades AAB or better, compared to 22.1% in England.

Bradford is still behind other cities in terms of inclusive growth

Figure 21– English Indices of Multiple Deprivation (IMD) 2015



Source: Metro Dynamics analysis of ONS IMD 2015 data

Proportion of LSOAs by (national) decile, IMD 2010 and 2015 indices and change

Decile	IMD 2010	IMD 2015	Point difference
1	31%	33%	2.0%
2	13%	10%	-3.0%
3	9%	13%	3.8%
4	9%	8%	-1.7%
5	9%	8%	-0.7%
6	8%	9%	0.2%
7	6%	5%	-0.7%
8	6%	6%	0.6%
9	4%	5%	0.6%
10	6%	5%	-1.0%

Note: Based on all LSOA. Due to boundary changes, the numbers of LSOAs should not be directly compared across the Indices of Deprivation 2015 and 2010; changes are measured as percentage point changes.

The sectoral analysis of previous sections suggests that despite the fact that Bradford is still undergoing structural change, there are signs to suggest that the district is finally moving towards new sectors typical of the knowledge-based economy.

The Good Growth for Cities Index (Demos-PwC 2016 Figure 22) ranks 42 UK cities for performance against 'good growth', intended as a holistic measure of economic success that takes into consideration principles of inclusiveness (Figure 20, on the next page). In the index, Bradford is 7th from bottom, and although its performance has improved compared to the previous year, this improvement has been comparatively small. According to another index, the ONS IMD, which ranks all English local authorities for multiple dimensions of deprivation, Bradford still ranks 30th (IMD 2015, rank of average rank). The IMD index also demonstrates positive change is occurring, albeit slowly, as Bradford has improved by three positions on the 2010 index. Bradford's poor ranking reveals the persistence of long-term challenges caused by economic shocks associated with industrial decline.

Bradford's relatively low-skill base represents a potential constraint to productive potential, and impacts levels of deprivation and disadvantage. Despite house prices being comparatively low, affordability is nevertheless an issue due to relatively low wages in the city. At a more granular level, a third of Bradford's neighbourhoods (represented in the map by the LSOA units) rank in the top decile for deprivation in England, up by 2 percentage points from 2010.

Figure 22 – Good Growth for Cities Index (2013-15)



Source: Demos-pwc 2016

The Council can play a key role in creating more opportunities for disadvantaged and fragile portions of the population. For example, Bradford Producer City capitalizes on the strengths of Bradford's economic identity linked to manufacturing while actively promoting the creation of more and better jobs. Another example, more specifically aimed at addressing the local skills gap and improving the integration of the employment support system, is Get Bradford Working. Initiatives of this type are critical for the promotion of inclusive growth and for coordinating growth opportunities with local employer and worker needs.

Metro — Dynamics

LONDON

3 Waterhouse Square
138 Holborn
EC1 N2SW

(+44) 0203 865 3082

MANCHESTER

Elliot House
151 Deansgate
M3 3WD

(+44) 0161 393 4364
