



Belfast Region City Deal

Industrial Strategic Framework

Draft

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1. The Belfast Region Approach

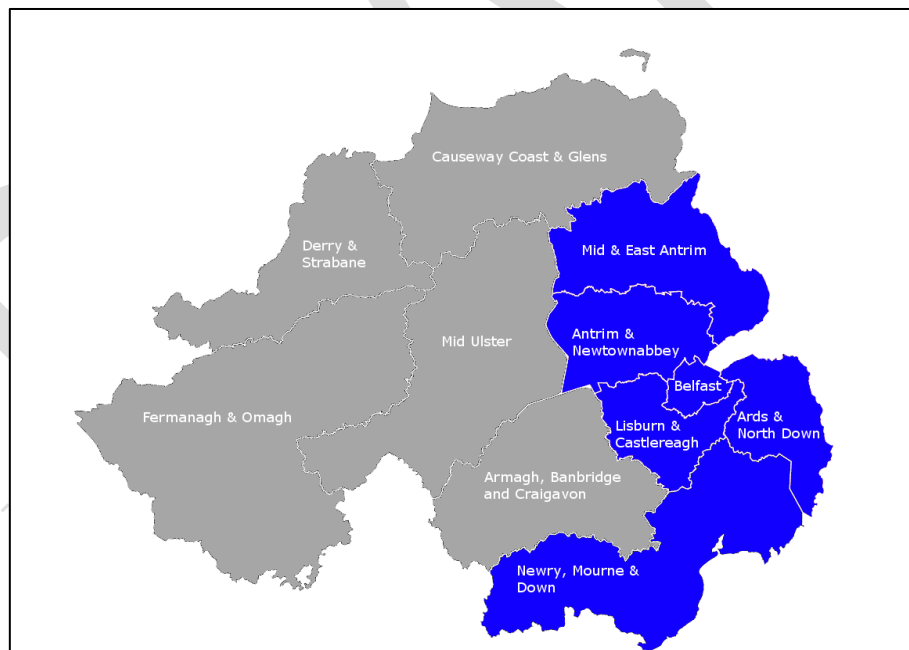
Introduction

The Belfast Region is a functional economic area based on the local authority areas within the Belfast Travel to Work Area, which takes account of the important interactions between demand and supply of skilled people in maximising sustainable growth. The Belfast Region also provides a scale that enables the development of a coherent sub regional industrial approach, a scale that would not be available at the city level itself. In 2016 the Belfast Region had 40% of the total Northern Ireland (NI) business base, with an employment share of 63%. The Belfast Region has a similar share of the knowledge economy firms in NI (50%) but, again, a higher share of knowledge economy employees (60%)¹. They also, have a higher value of external sales than businesses in NI generally. The Region is an economic driver for all of Northern Ireland, generating total GVA of approximately £22,770m and providing critical access and transport links for trade and tourism.

The economic geography as outlined in Figure 1 below includes:

- Ards & North Down Borough Council
- Antrim & Newtownabbey Borough Council
- Belfast City Council
- Lisburn & Castlereagh City Council
- Mid & East Antrim Borough Council
- Newry, Mourne & Down District Council

Figure 1: The Belfast Region



The Belfast Region comprises a geography and an infrastructure which creates the opportunity to build economic links with other key city regions, notably along the eastern corridor to Dublin and to other parts of the UK. The Republic of Ireland's new National Planning Framework describes the corridor as follows.

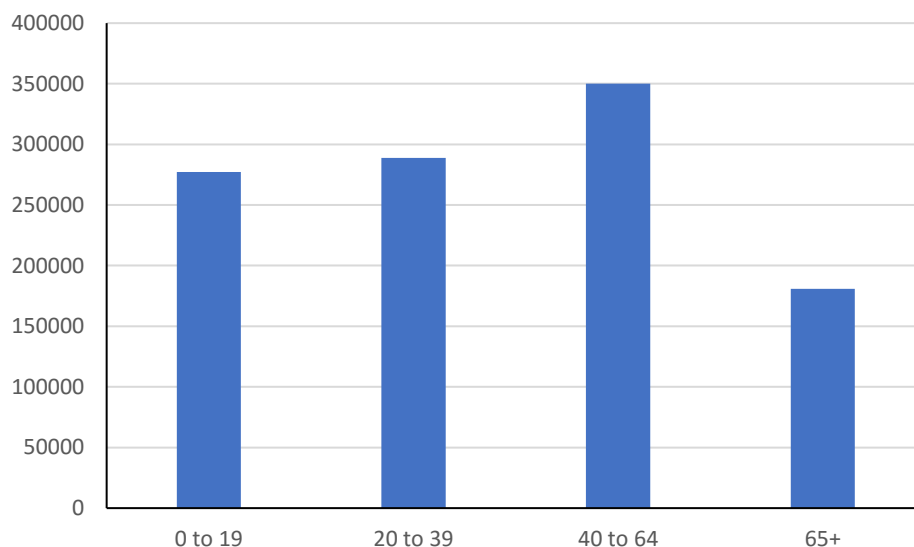
¹ [Brexit and the Belfast City Region. Ulster University Economic Policy Centre. October 2017](#)

“The Dublin to Belfast Corridor is the largest economic agglomeration on the island of Ireland, with the cities and towns along the corridor home to a population of around 2 million people, exclusive of wider catchments. The corridor links the two largest cities and several of the largest towns on the island by high-capacity road and national rail links and plays a critical role in supporting economic growth and competitiveness.... As part of the National Planning Framework, the Government intends to capitalise upon and further support and promote the inherent economic potential of the corridor, building upon existing strengths.”

The corridor is also central for connectivity, given that it provides an entry point through its airports and ports. Three major airports – Dublin Airport, Belfast International Airport and Belfast City Airport – collectively manage over 35 million passengers each year, a figure which looks set to continue to rise². Likewise the ports along the eastern corridor account for the vast majority of the island’s total container port traffic and provide key access points for trade with the UK. Belfast City and Belfast International Airports provide key connections with the rest of the UK and Europe with almost 200 flights each week to London airports. Belfast International is the 5th busiest airport in the UK for domestic passenger traffic and also services major UK and EU cities such as London, Manchester, Edinburgh, Paris and Geneva. Belfast also serves a range of UK and European destinations including London (London City, Gatwick and Heathrow airports) Brussels and Amsterdam.³

The Belfast Region is young, ambitious and growing, with more than 550,000 people under the age of 40 and two excellent universities supporting the education of over 40,000 students within the Region⁴ as well as four Regional Colleges with a combined enrolment of 100,000.

Figure 2: Age Structure - Total Persons 2016 Belfast Region



Source: NISRA 2016 Mid-Year Estimate of Population

Why a Belfast Region Approach?

Successful city regions have become the main source of both national and global economic productivity. The draft NI Industrial Strategy, Economy 2030⁵, highlights the importance of

² <http://npf.ie/wp-content/uploads/Project-Ireland-2040-NPF.pdf>

³ <http://www.belfastcity.gov.uk/business/investinginbelfast/Connectivity.aspx>

⁴ <https://www.economy-ni.gov.uk/publications/qualifications-gained-uk-higher-education-institutions-northern-ireland-analysis-201617>

⁵ <https://www.economy-ni.gov.uk/consultations/industrial-strategy>

“cities as deliverers of economic growth”. The Centre for Cities⁶ has argued that cities and city regions must be at the core of industrial strategies, highlighting the clustering of economic activity in city regions, with Britain's 62 largest areas accounting for 60 per cent of national output. The reason for this clustering is that cities and city regions provide businesses with access to business fundamentals:

- Access to knowledge
- Access to infrastructure
- Access to workers

As the importance of the Knowledge Economy grows, so city regions are best placed to provide businesses, and in particular businesses with an export focus, with access to knowledge clusters, to the large numbers of high skilled knowledge workers they require and to knowledge enabling infrastructure which supports global commerce, rapid communication and the use of cutting edge technology.

Other city regions are growing at pace and recent studies show the impact of city region approaches in effectively attracting foreign investment, small business clustering, matching skills to employers' needs, connecting people to opportunity, and putting in place vital infrastructure necessary to compete. This is evidenced by the UK Government's promotion of the Northern Powerhouse and the investment in high speed rail projects (HS2 and HS3), and on the island of Ireland with the significance of Dublin as the engine for growth for the rest of the country. It is important that the connections between cities (e.g. Belfast, Derry/Londonderry, Newry and Dublin) and key economic drivers, such as the Eastern Corridor, are strengthened if economic benefits and associated growth are to be delivered.

Research and evidence has demonstrated that successful city regions are characterised by: economic diversity; innovation in firms and organisations; human capital and skilled workforce; connectivity - internal and external; place quality - social, cultural, environmental; governance, leadership and strategic capacity to create and deliver long term development; decentralisation of decision-making powers and de-concentration of investment. The challenge is to build on those things that play to the competitive advantage of the Belfast Region and ensure it has the assets to ensure it continues to drive growth.

A successful Belfast Region is vital to the future wellbeing of everyone living in NI; with a population of around 1 million and contributing over two-thirds of GVA⁷ it is the regional employment centre and features key networking and connectivity functions for the region in terms of Europe, the UK and the island of Ireland.

Table 1: Belfast Region – Driving the Regional Economy

Size of the economy (2015)	Population	% of UK Population	Total GVA	% of UK GVA	Total number of jobs	% of UK Employment
Belfast	338,907	0.52%	£ 10,549m	0.64%	229,000	0.77%
Lisburn & Castlereagh	140,205	0.22%	£ 2,437m	0.15%	54,000	0.18%
Ards & North Down	158,797	0.24%	£ 1,854m	0.11%	37,000	0.12%
Antrim & Newtownabbey	140,467	0.22%	£ 2,631m	0.16%	55,000	0.18%

⁶ <http://www.centreforcities.org/publication/10-ideas-place-based-industrial-strategy/>

⁷ <https://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedincomeapproach/december2016>

Mid & East Antrim	137,145	0.21%	£ 2,739m	0.17%	53,000	0.18%
Newry, Mourne & Down	176,369	0.27%	£ 2,560m	0.16%	55,000	0.18%
Belfast Region	1,091,890	1.68%	£ 22,770m	1.39%	483,000	1.61%
Northern Ireland	1,851,621	2.84%	£ 34,409m	2.08%	792,000	2.66%
UK	65,110,034	-	£ 1,650,623m	-	29,740,600	-

Note: (a) All GVA, Population and Employment figures are for 2015.
(b) Total employment is for persons in employment aged 16 and over and by place of work

Source: (a) Regional GVA (I) by local authority in the UK, ONS
(b) Labour Market Structure – Employment Activity by local government district, NISRA and NOMIS

The Belfast Region continues to have a range of very significant challenges, such as lower levels of productivity and innovation and high levels of economic inactivity, and these will be explored in some detail within this framework. However, its unique characteristics and the scale provided by the Belfast Region City Deal (BRCD) partners provide a once in a generation opportunity to refocus its economic fundamentals.

A Vision for Inclusive and Sustainable Growth

In addition to the economic rationale for developing the Belfast Region approach, the Council partners share a common vision for the Region, a vision of inclusive and sustainable growth; growth that benefits everyone. Council community plans have a common focus on driving inclusive and sustainable economic growth, seeking not only to stimulate economic growth and create jobs through investment, but also ensuring that as many people as possible have access to those jobs by improving employability and skills. These goals are aligned to the draft Programme for Government⁸ and the draft NI Industrial Strategy, which emphasises the importance of “building a globally competitive economy on the pillars of innovation, enhanced skills and employability, an international outlook and the best economic infrastructure we can build”.

In many ways it is this shared vision, underpinned by support from political representatives from all parties across the Region, which is the most important aspect of the Belfast Region approach. It is this collective and shared vision that will enable the partners to deliver a coherent, long-term approach to tackling the key economic challenges within the Region. Despite reducing unemployment, continuing high levels of deprivation and high levels of economic inactivity are major concerns for the BRCD partners. It is for this reason that, in line with the draft Programme for Government and Economy 2030, the Council partners have established a vision of Inclusive Growth for the Belfast Region that will direct the development and implementation of this framework. Economy 2030 contains a commitment that all sections of society should share equally in the benefits of sustainable economic growth. The BRCD partners share this commitment and have agreed to work in partnership towards the design of a Belfast Region City Deal “**to ensure inclusive growth, a positive impact on the most deprived communities and a balanced spread of benefits across the region**”.

The global economy is facing unprecedented challenges and uncertainty. The uncertainty around future negotiations for the UK exiting the EU contributes to a fluctuating policy context; reinforcing the pressing need to develop new integrated approaches to ensure the region is competitive and to secure economic growth and social wellbeing. New models are needed and central to this is the recognition that more can be achieved in collaboration

⁸ <https://www.northernireland.gov.uk/consultations/draft-programme-government-framework-2016-21-and-questionnaire>

with others; building on our strengths, complementing and reinforcing our areas of distinct advantage and investing in our future.

Stronger collaboration at a city region level enhances our ability to shape priorities and to work together to deliver on the many issues that can more effectively be addressed by working across traditional local authority boundaries, enhancing and honing our delivery with longer term investment rather than duplicating our resources.

Purpose of the Strategic Framework

The draft Programme for Government for Northern Ireland aims to deliver the following outcome: "We Prosper through a strong, competitive, regionally balanced economy". Both the recently published UK Industrial Strategy, Building a Britain Fit for the Future⁹ and the draft NI Industrial Strategy recognise the fundamental importance of a coherent approach, across national, regional and local government and between the public and private sector, to the development of an economy which can compete on a global stage. Both strategies also recognise the importance of place-based strategies, and in particular strategies for city regions, in delivering solutions which tackle the specific economic challenges of a region by focusing on strategies that take account of its character and strengths.

The six Council partners in the Belfast Region have therefore agreed to come together to develop a strategic framework that supports the delivery of the UK and NI industrial strategies at a Belfast Region level. This strategic framework will underpin the development of the BRCD, which the partners believe can unlock the full potential of the people living within the Belfast Region.

The strategic framework will establish a shared vision for sustainable and inclusive growth of the Belfast Region based on a robust analysis of the competitive strengths and the key economic challenges facing the Region. It will also evaluate how to use our competitive advantages to respond to the key challenges for the Region in the context of UK and NI industrial policy and establish strategic priorities for the Belfast Region City Deal.

⁹ <https://www.gov.uk/government/publications/industrial-strategy-building-a-britain-fit-for-the-future>

2, Strategic Context and Alignment

The draft NI Programme for Government, draft NI Industrial Strategy and the recently published UK Industrial Strategy, provide clear policy frameworks within which this sub-regional industrial framework has been developed and will guide the development of the ambitious industrial programme being created by the BRCD partners. Both the UK and draft NI strategies identify the potential contribution to be made to inclusive growth by place-based strategies. Economy 2030 identifies five pillars for growth that are necessary to deliver the Executive's vision of "A globally competitive economy that works for everyone". These are:

1. Accelerating Innovation and Research
2. Enhancing Education, Skills and Employability
3. Driving Inclusive Sustainable Growth
4. Succeeding in Global Markets
5. Building the Best Economic Infrastructure

By building these pillars, the draft NI Strategy expects to deliver a range of ambitious inclusive growth targets as set out in the attached infographic. The BRCD partners have commissioned detailed analysis in support of this strategic framework to examine how in areas, such as its response to Brexit and the need to match skills and infrastructure with best in class 21st century requirements, they can contribute to delivery of these targets and in so doing tackle fundamental structural weaknesses in the regional economy.

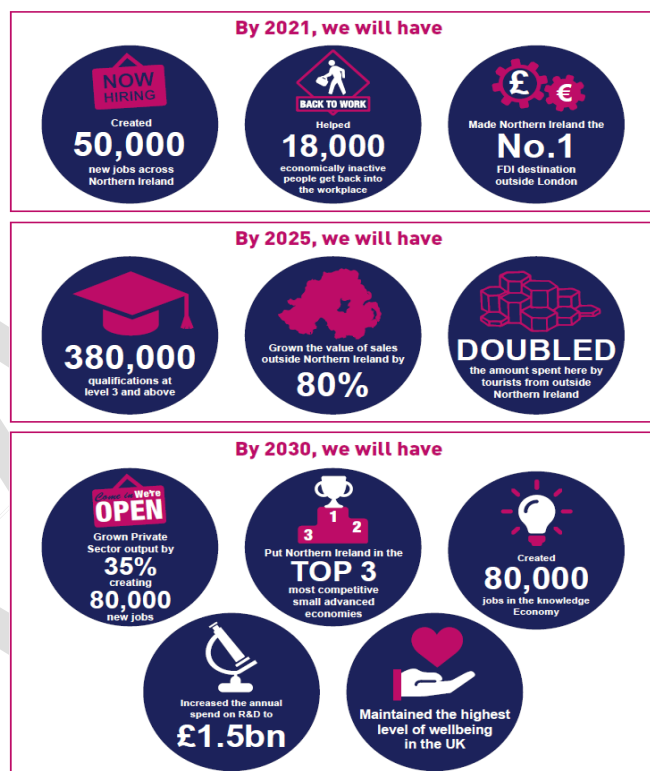
Economy 2030 seeks to learn from global best practice in small advanced economies and proposes that NI should aim to become one of the three most competitive small advanced economies (among a benchmark group of 9 small advanced economies). The key lessons from these economies include the importance of:

- Strategic Coherence
- Prioritisation
- International Engagement
- Innovation and Human Capital
- Enterprise

Through the partnership developed to support the BRCD and this framework, the BRCD partners are seeking to provide the coherence necessary to deliver a programme of change and investment which delivers and sustains long-term and substantive, measurable changes in productivity, wages and employment levels.

In accordance with the recognition that small economies need to build on their distinctive strengths, an overarching priority within Economy 2030 is "Supporting Strong and Emerging Sectors". The draft Strategy highlights the importance of promoting and enhancing niche

THE NORTHERN IRELAND ECONOMY: 2017–2030 MILESTONES



areas and sectors whereby NI may have a competitive advantage and whereby it could be world class. The six broad sectors identified are:

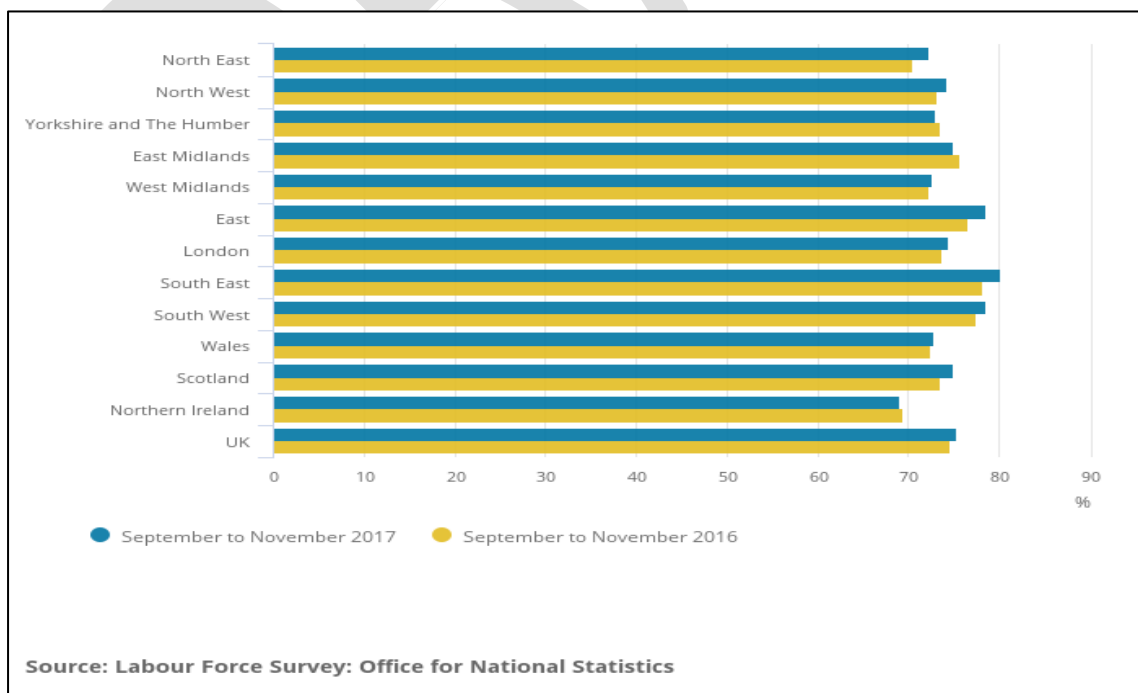
- Financial, Business and Professional Services
- Digital and Creative Technologies
- Advanced Manufacturing, Materials and Engineering
- Life and Health Sciences
- Agri-Food
- Construction and Materials Handling

The BRCD partners recognise the need to both build an ecosystem which supports innovation and enterprise and to prioritise support for those sectors which have real competitive advantage.

The Belfast Region has considerable strengths across these sectors and the BRCD partners are working with our world-class universities and further education institutions, as well as the myriad companies who have been at the vanguard of our burgeoning creative, knowledge and tech-based success story to agree the catalytic projects that will take performance and productivity to the next level. The BRCD partners also recognise the growth potential of the tourist industry and will seek to establish a strong tourism product that delivers economic benefits equivalent to those being achieved in the best performing areas of the UK and Ireland.

Economy 2030 and the delivery plans for the draft Programme for Government both identify the positive progress that has been made in returning employment levels to the position prior to the global economic downturn, with 50,000 of private sector employee jobs growth since 2012. Unemployment levels have now fallen to historic lows and are now below the UK average. However, Economy 2030 recognises that despite the reductions in unemployment, fundamental problems remain within the economy in relation to levels of economic inactivity and low levels of productivity. Labour Force surveys therefore continue to show that despite falling unemployment, NI employment levels remain the lowest in the UK.

Figure 3: Employment rates by region and comparisons year-on-year, seasonally adjusted, September to November 2016 & September to November 2017



Economy 2030 also recognises that there is a need not just to increase employment, but also to increase the proportion of people in “good jobs”, a key determinant of which is pay. The speed of economic change and uncertainty create ongoing challenges in delivering and sustaining high value jobs, as demonstrated by the loss of well-paid manufacturing jobs within the Belfast Region in recent years. Overcoming such challenges requires a recognition of the realities of the speed at which technology is creating change within the economy. These changes include removing the need for certain jobs as a result of automation, as well as creating new jobs in rapidly growing areas, such as the use of artificial intelligence & data analytics in health care.

Our five foundations align to our vision for a transformed economy



The BRCD partners recognise the need to tackle productivity levels if our aim of both “more and better jobs” is to be realised. Published on 27 November 2017, the UK White Paper, Building a Britain Fit for the Future, aims to “create an economy that boosts productivity and earning power throughout the UK”. The Strategy sets out a vision for:

- the world's most innovative economy
- good jobs and greater earning power for all
- a major upgrade to the UK's infrastructure
- the best place to start and grow a business
- prosperous communities across the UK

The UK Strategy has a strong focus on productivity and seeks to strengthen the five foundations of productivity outlined above. It also now places a significantly increased emphasis on the “role of regional cities” as “motors of growth to the regional and national economy”. The Strategy recognises that while the UK economy has significant strengths, “the UK has greater disparities in regional productivity than other European Countries,” and “many places are not fulfilling their full potential.” The UK Strategy therefore places a strong emphasis on the development of local industrial strategies that will be, “long term, based on clear evidence and aligned to the national industrial strategy”. It also recognises the particular role of City Region Deals in driving growth and delivering local solutions to the productivity challenge facing most regions of the UK, outside the South East of England.

The BRCD partners agree that local people are best placed to ensure that the Belfast Region Economy fulfils its potential by:

- **Building on strengths and extending excellence into the future;**
- **Closing the gap between our most productive companies, industries, places and people and the rest; and**
- **Making our city region one of the most competitive places in the world to start or grow a business.**

The BRCD partners are committed to ensuring that our region also has the connections it needs to succeed, both transport and digital, and the right tourism infrastructure to continue our success story into the future. We are working in partnership to identify the skills we need

for the future success and are committed to ensuring that as many people as possible have the skills required to access the opportunities we are collectively creating.

A particular feature of the UK Strategy is the establishment of four grand challenges to put the UK at the forefront of the industries of the future. These are:

- **AI & Data Economy**- putting the UK at the forefront of the artificial intelligence and data revolution;
- **Clean Growth**- maximising the advantages for UK industry from the global shift to clean growth;
- **Future of Mobility**- becoming a world leader in the way people, goods and services move;
- **Ageing Society**- harnessing the power of innovation to help meet the needs of an ageing society.

Nowhere is the challenge of the changing economy more evident than in relation to the challenges and opportunities of new technology. It has been estimated that within 20 years 90% of all jobs will require some level of digital skills and a recent report¹⁰ by Catalyst Inc and Ulster University's Economic Policy Centre identifies both the challenges and opportunities of automation:

- In the UK it has been estimated that in the period 2001-2015, 800,000 jobs were lost to automation and 3 500 000 were created;
- By 2030 up to 15 million jobs across the UK and up to 50% jobs in NI are at risk due to automation, with the vast majority of these being in jobs requiring no or low skills;
- By 2030 5% of all jobs in the UK will be related to robotics;
- Automation could increase productivity within the NI economy by 5.4%.

The BRCD partners recognise that as we tackle the problems that are with us now we must also look to the long-term, both in terms of maximising strengths and mobilising new capabilities through investment in both place and people. In developing our means of delivery across priority sectors and our pillars for growth, BRCD partners will seek to identify how it can build the Region's responsiveness to these grand challenges and the underpinning mega challenges facing developed economies across the world.

¹⁰ <http://connect.catalyst-inc.org/assets/general/KE-Report-Final.pdf>

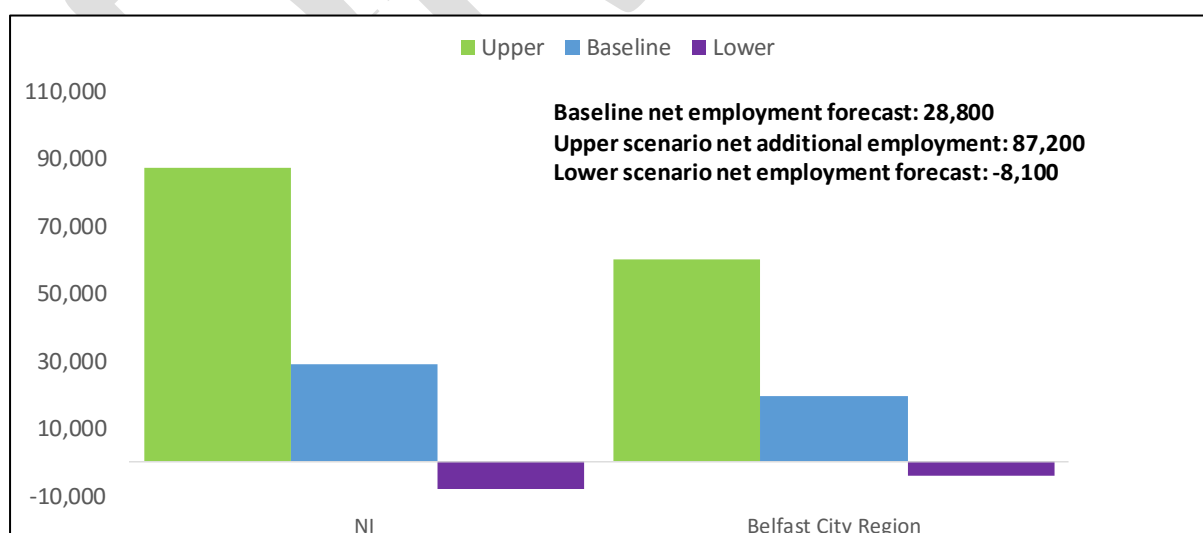
3. The Implications of Brexit

The exact outcome of Brexit is uncertain and will depend on a combination of the trade deal negotiated and the mix of policies chosen. However, it is clear that Brexit poses some unique questions for NI, and indeed for the Belfast Region, given the land border with the Republic of Ireland (ROI) and the extent of interconnections with both the ROI and UK economies. The BRCD partners therefore commissioned specific analysis¹¹ from Ulster University's Economic Policy Centre (UUEPC) to inform and support their response to Brexit and will continue to refine and develop their collective approach in response to the emerging deal and related agreements.

The employment forecasts in figures 4 and 5 were produced by UUEPC for the BRCD partners. All scenarios assume that Brexit will occur with varying types of impact, some of which depend on how orderly or otherwise the exit is and how quickly a new trade relationship with the EU is established. The upper scenario assumes that the UK will experience a smooth trade-friendly Brexit, alongside the convergence of NI to the UK's economic performance, something which UUEPC regard as a best-case scenario. In contrast, the lower scenario assumes a poorly coordinated exit from the EU in conjunction with a continued squeeze on real incomes which leads to much lower growth rates, or a worst-case scenario. The most likely outcome, the baseline scenario, assumes that Brexit will have the effect of slowing business investment, there will be a UK-wide cap on inward migration at 185,000 per annum, and that current economic performance will underpin future trends.

Figure 4 shows the change of employment for both NI and the Belfast Region for the baseline, upper and lower scenarios up to 2026. In the baseline scenario, NI is expected to gain 28,800 jobs with the Belfast Region accounting for up to two-thirds (19,200 jobs) of this net change. In the upper scenario NI is expected to create 87,200 new jobs by 2026, with 69% of this creation (60,100 jobs) in the Belfast Region. Finally, in the lower scenario NI can expect to lose 8,100 jobs, while the Belfast Region could lose 4,500 jobs (55% of the total losses). In terms of employment growth (or loss) rates, the Belfast Region is expected to be slightly better than the NI average across each of the baseline, upper and lower scenarios.

Figure 4: Belfast Region & NI Net Employment Change, Baseline; Upper & Lower, 2016-2026

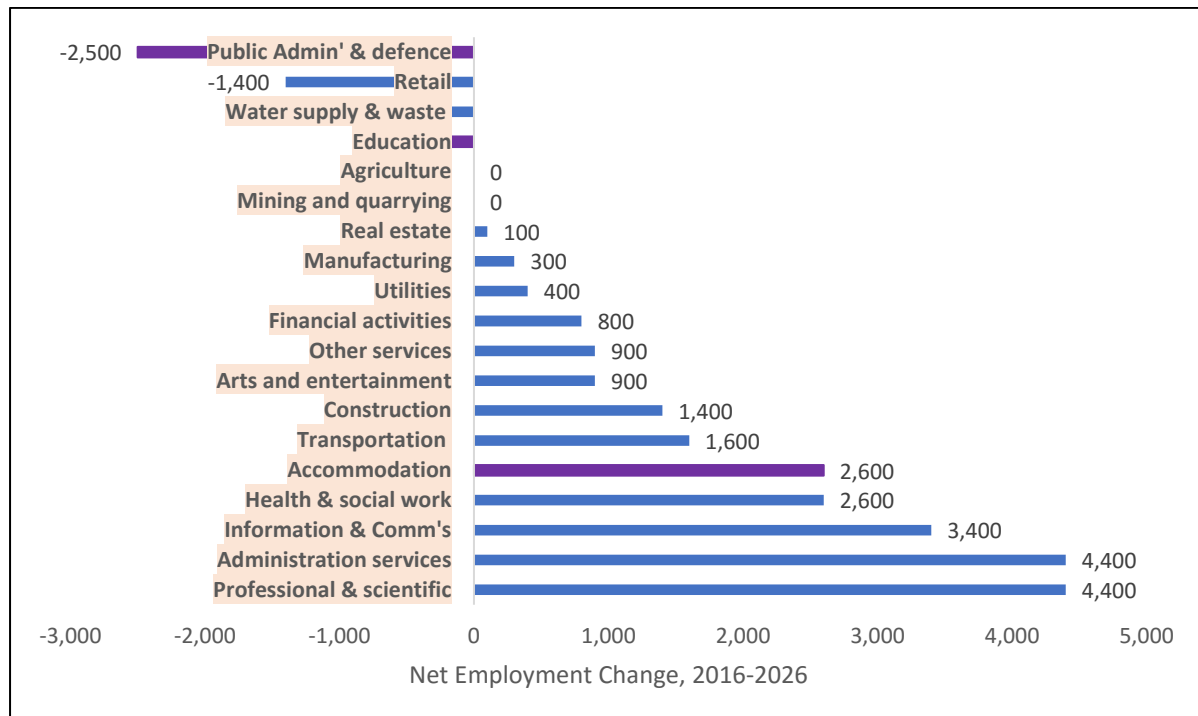


Source: UUEPC analysis

¹¹ Brexit and the Belfast City Region: UUEPC, October 2017

Figure 5 uses the baseline scenario to highlight the sectoral changes in employment between 2016 and 2026 in the Belfast Region. The sectors that show the biggest change in employment are Professional Services and Administration Services (an additional 4,400 jobs over the 10-year period). Public Administration and Defence will see the biggest fall in employment with an expected loss of 2,500 jobs. In the baseline scenario a Corporation Tax reduction does not take place due to uncertainty over price and mechanism, which means that these sectoral changes are a result of current clustering trends in the Belfast Region and the importance and significance of Belfast in areas such as FinTech, Cybersecurity and call centres.

Figure 5: Belfast Region Net Employment Change, Baseline, 2016-2026



Source: UUEPC analysis

The UUEPC analysis notes that the wide range of scenarios are a result of general economic and political uncertainty, not only in NI but also in the UK and further afield allied to uncertainty on the future shape of Brexit, the resulting trade outcomes and how the process is managed. However, in each of the scenarios and resulting employment forecasts, UUEPC identify clear trends:

- Given its weight within the NI economy, the Belfast Region will experience much of the change; and
- Belfast city will be the driver for change within the Region, not only in terms of employment growth but also in changes to the sub-region's sectoral structure.

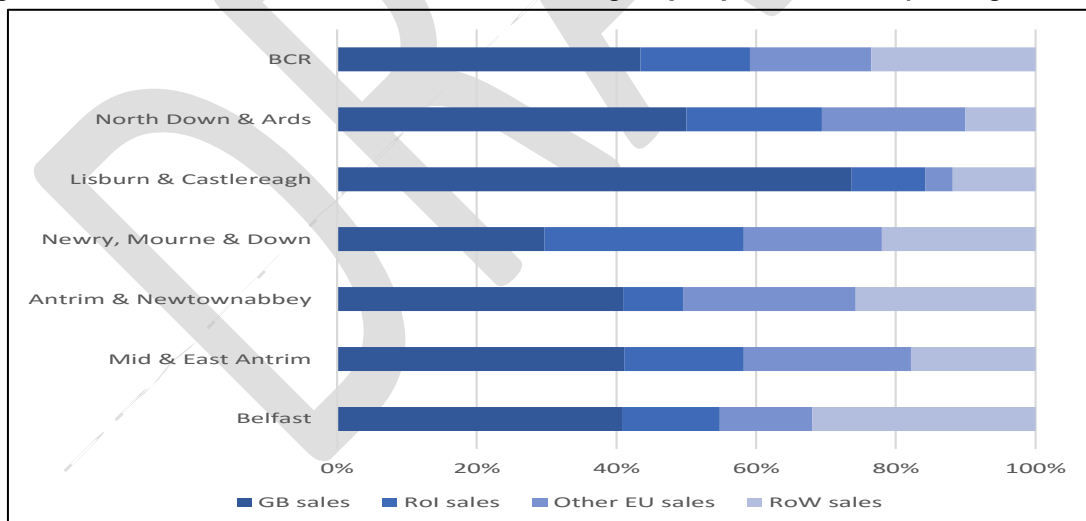
The detailed analysis and projections provided to the BRCD partners emphasise both the uncertainties and complexities of Brexit and identify a number of potential areas of impact.

Figure 6: Potential areas of impact from 'Brexit' to the Belfast Region



Analysis by Invest NI identified that in 2015 external sales outside NI by firms located within the Belfast Region are estimated to be £7bn. Figure 7 shows the markets for these sales, broken down by the six councils that make up the Belfast City Region. The largest external market for the Region is Great Britain, to which goes around 43% of goods and services sold outside the Belfast Region. UUEPC identify that whilst the GB market is certainly crucial, its share is significantly smaller for the Belfast Region than for NI as a whole (43% vs 58%). A third (33% compared to 24% for NI as a whole) of the £7bn in external sales went to the EU in 2015.

Figure 7: External sales market shares for the Belfast Region (BCR) and the corresponding councils, 2015



Source: Invest NI regional briefings

Figure 7 shows that there are differences in market orientation within the Belfast Region. Ards & North Down and Lisburn & Castlereagh (which between them account for almost 10% of NI's exports) are much more dependent on the GB market than other Council areas. Whereas, only 15% of total external sales for the Belfast Region go across the border, in Newry, Mourne & Down the cross-border trade makes up almost 30% of the external sales and less than 10% of Antrim & Newtownabbey's. UUEPC highlight that proximity to markets is one obvious reason for the variation but it is not the only one. Differences in the sectoral make-up of the Councils' enterprise bases is also a factor. Agri-food, engineering and

construction-related products are key to Councils in the southern part of the Belfast Region, while in Belfast and Antrim & Newtownabbey, services and high-tech industries are important and the Rest of the World markets more important.

Cross-border trade is significant for many NI businesses. Exports to ROI increased by £73 million in 2016 (2.2%) to £3.4 billion¹². The British and Irish governments and the then NI Executive have all recognised the key place that integrated all-island firms have in agri-food (and other sectors) as a first step into exporting for firms. The UUEPC analysis for the BRCD highlighted that any fresh obstacles to this cross-border and all-island business (through tariffs or non-tariff barriers) are likely to undermine efforts to diversify the export base and Council efforts to promote an export pathway for businesses.

The BRCD partners will continue to monitor developments as negotiations proceed and consider how best to adjust their collective approach to deliver our vision of inclusive growth. However, the analysis provided is informative in both highlighting the challenges to the Belfast Region in delivering our ambitions for both jobs and productivity and in developing the strategies that are necessary to improve fundamental building blocks for the regional economy. The partners recognise that some solutions, such as the need to replace the €3.5bn allocated for different agriculture, peace and regional assistance programmes in NI between 2014 and 2020 and to enable freedom of movement of people, will need to be progressed in the political sphere. However, the strategic framework will identify how the BRCD can contribute to our response to the challenges of Brexit, including through improving trade, delivering investment and increasing employment growth.

In particular, to build on key potential growth areas, UUEPC advise on the need to accelerate diversification of markets and support innovation and start-ups which have the potential to enter markets opened by new trade deals. As an example, across NI, businesses in the Knowledge Economy export almost £3bn outside the UK, with a high proportion of this sold outside of the EU. There is also the need to build a more diversified export base. The UUEPC analysis identified that currently businesses in the Belfast Region have a slightly higher share of employment (59%) than of exports (54%). Part of this diversification, given the importance of Professional Services and ICT to the current and future Belfast Region economy, will involve refocussing the efforts of the service sector to export.

The UUEPC analysis also highlights that in recent years Foreign Direct Investment (FDI) has been a relative success story, with NI in the top 10 countries/regions for FDI per head from 2010 to 2015. Figures from Invest NI show that the Belfast Region has been key to this success for NI. The Region has attracted as much as £1.1 billion FDI in the past 5 years, creating almost 10,000 jobs. The figure of £1.1 billion is the equivalent of 84% of the total FDI in NI. The UUEPC analysis notes that the majority of this investment and job creation originated from North America and the Rest of the World (51% of the total), followed at a distance by GB (38%), with the EU only accounting for 11% of the total investment. UUEPC advises that the concentration of investment and jobs created is best explained by the growing tendency for FDI location in larger urban areas, especially investment in the services sectors, due to the availability of a large labour pool and the increased opportunities for firms which can arise from clustering and spillover effects.

It is evident that in the last five years, FDI has been a key element in increasing employment growth and reshaping the Belfast Region sectoral make-up to become a more service-based region. However, there is now greater uncertainty about the next phase of attracting FDI and UUEPC advises that the **Councils must ensure they are equipped to take any possible opportunities offered by Brexit, in particular those around serving the UK market. When competing with other locations within the UK for this type of investment the Belfast Region can**

¹² <https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/BESES-Publication-2016-Headline-results-pdf.pdf>

offer a proposition highlighting the presence of leading IT and business service firms and its proximity/adjacency relative to others in Dublin, encouraging clustering effects.

For those foreign-owned businesses currently located in the Belfast Region, the level of skills in the local resident population and availability of workers are key reasons for FDI attraction to the Region. BRCD partners recognise the fundamental importance of collaborative investment in ensuring that workers with the requisite skills are available and match the requirements of employers within our growth sectors.

UUEPC also highlights the importance of free movement of labour across the border in supporting the Belfast Region's proposition to investors. Given the employment forecasts, with 17,500 jobs being created in five sectors some of which currently have high proportions of migrant workers (Professional Services, ICT, Administrative Services, Accommodation and Health), BRCD partners and UUEPC recognise the need to take account of such factors when developing plans in relation to future skill requirements.

The UUEPC analysis highlights the ever-increasing importance of the tourism sector to the NI economy which now employs as many people as the manufacturing businesses. The Belfast Region has seen significant progress and improvements in recent years, driven by a rising number of visitors. In 2016 tourism expenditure in the Belfast Region was around £550m, almost two thirds of the total tourism spend in NI. This marks a rise of 15% on the previous year and is almost £100m higher than expenditure in 2014. The BRCD partners see growth in Tourism as an important strand of its industrial strategy with the capability to add significant numbers of new jobs. Growth in the industry has however relied significantly on labour from within the EU. Irrespective of the Brexit deal it seems likely that **future growth in tourism will require the availability of more people with the requisite skills and investment in skills for employment in the tourist industry will form a key element of the Belfast Region strategy to achieve inclusive growth.**

The UUEPC Brexit analysis also emphasises the importance to the development of the tourism sector of easy access to NI and ensuring the relative free movement of people across the border through a continuation of the Common Travel Area and flexibility around visitor visas. **Investment in transport infrastructure will also be key to growing tourism post Brexit. This will require the development of entry infrastructure at local airports and ports as well as investment in transport infrastructure along the Eastern corridor.**

4. Our Key Growth Challenges

Productivity

Like many other parts of the UK outside London and the South East of England, the Belfast Region faces a number of fundamental economic challenges. One of the most significant is the productivity of the economy. Growing levels of productivity enable increased investment by firms and allow business to increase the wages of their employees. Increased productivity also generates increased tax revenue that allows government to invest in public services.

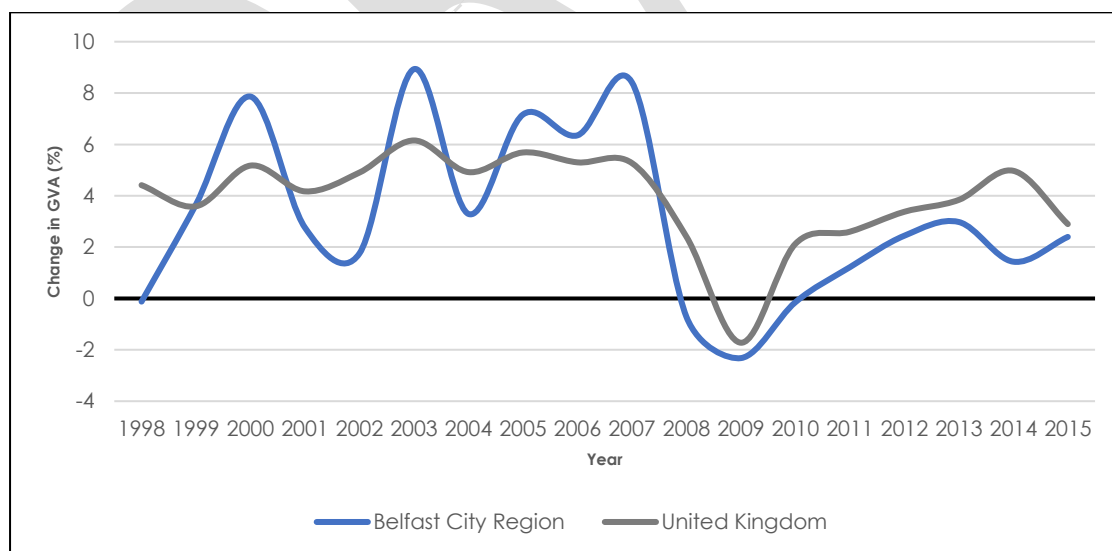
Research carried out by the Bank of England suggests that a range of factors can explain the lower levels of productivity in the UK compared with many of its competitors, since the financial crisis. These include cyclical explanations (such as spare capacity within firms) and more persistent factors (such as reduced investment, impaired resource allocation and unusually high firm survival rates)¹³.

In their 2016 report¹⁴ "Unlocking regional growth, understanding the drivers of productivity", the CBI identified the four main drivers of productivity as being:

1. Educational attainment of young people at 16 and skills
2. Transport links that widen access to labour
3. Better management practices
4. A higher proportion of firms who export and innovate

Whilst the Belfast Region contributes to over two-thirds of the total GVA for NI, when compared to the other UK City Regions the Belfast Region has the smallest economy, contributing to just 1.4% of the total United Kingdom's output¹⁵. Despite positive growth, Belfast GVA growth between 2008 and 2015 still lagged behind the UK average (average difference being 2%).

Figure 8: GVA change by region, 1998 to 2015



Source: Office of National Statistics

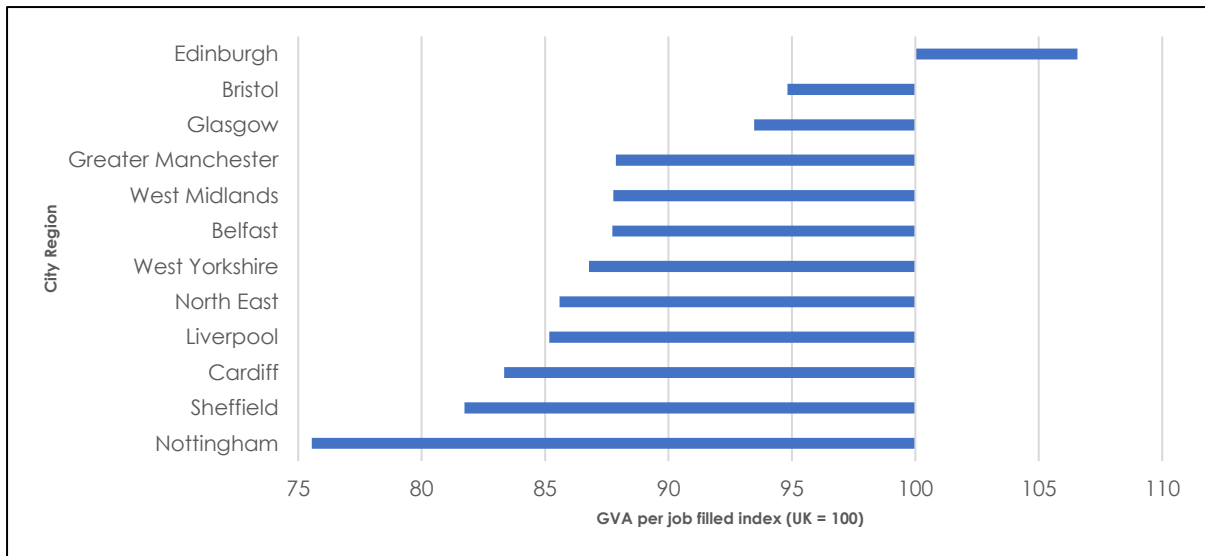
¹³https://www.ulster.ac.uk/data/assets/pdf_file/0008/118385/Understanding_productivity_in_Northern_Ireland_27_September_2016.pdf

¹⁴<http://www.cbi.org.uk/insight-and-analysis/unlocking-regional-growth/>

¹⁵<https://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedincomeapproach/december2016>

In terms of the productivity of the city region economies (calculated as GVA per job filled), with the exception of Edinburgh and Nottingham, there is only a small variation among a number of the regions in 2015. For the Belfast Region (using the combined NUTS3 regions of Belfast, Outer Belfast and East of NI as a proxy), productivity was approximately 12.9% below the UK average.

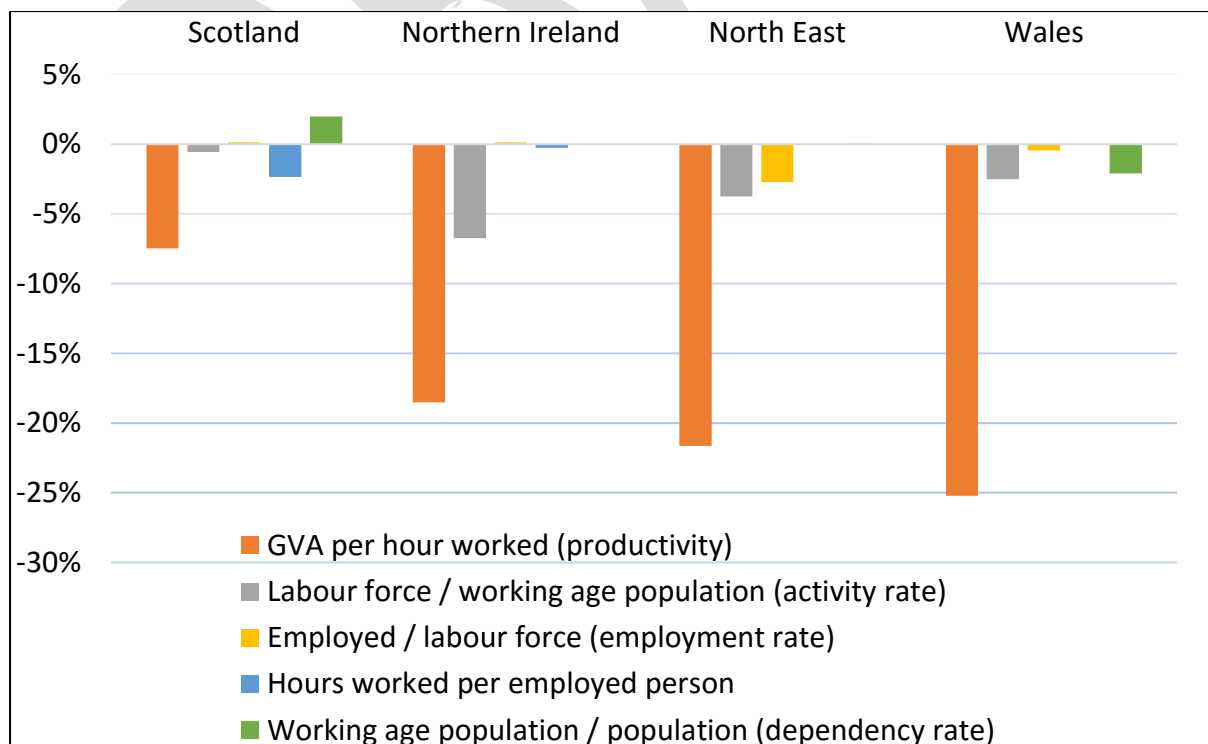
Figure 9: Labour productivity (GVA per job filled) by City Regions, 2015



Source: Office for National Statistics

UUEPC in its report on understanding productivity in NI identified that within NI the most important contributory factors to the regional GVA gap with the UK average are productivity and economic inactivity rate.

Figure 10: Decomposition of regional GVA per head gap for selected Uk regions, 2012-2015 average



Sources: Regional Accounts (GVA), Labour Force Survey (labour force & total employment), Annual Survey of Hours and Earnings (hours worked), Nomis (mid-year population and working age population estimates), UUEPC analysis

Tackling the productivity gap in the Belfast Region will require action in relation to both what businesses do and how they do it. In relation to what businesses do, there is a need to increase employment in high value added sectors, such as advanced manufacturing and digital and creative technologies. In terms of how it does it, there is a need, within all sectors, for increased investment, better use of technology and more efficient processes.

Tackling the economic inactivity rate will require more than the creation of new jobs. Research demonstrates that high inactivity levels have persisted even during periods of jobs growth. Tackling inactivity is also about more than productivity, it is about ensuring that the BRCD vision of inclusive growth can be realised, creating opportunities for all citizens to benefit from economic growth.

BRCD partners are committed to addressing the productivity challenge by:

- (a) Seeking to increase investment in infrastructure, innovation and skills to support the relative and real-term growth of highly productive, wealth generating sectors in which the Belfast Region has competitive advantage;**
- (b) Investing in infrastructure, innovation and skills to support employment growth, and developing a new approach to employability and skills that seeks, through the integration of services and support, to tackle high levels of economic inactivity.**

Research and Innovation

Concern about the need for sufficient investment in science and research and improving the capacity for innovation is common to both the UK and draft NI industrial strategies. The NI Innovation Strategy¹⁶ highlights that innovation is much more than Research and Development (R&D). It includes changes to products and processes, introduction of new business models, organisational changes and entering new markets. Research by NESTA suggests that less than 20% of investment in innovation by UK firms is in the form of R&D. "If firms invest in skills, leadership, design, branding, training or marketing – they are investing in innovation."

Whilst previous governments have acknowledged the need to support scientific research, in terms of percentage of GDP invested in research, the UK remains behind many of its global counterparts. The UK Industrial Strategy commits to closing that gap by increasing the level of total R&D investment to 2.4% of GDP by 2027. Economy 2030 aims to increase the annual spend on R&D in NI to £1.2 billion by 2025 and the NI Innovation Scoreboard¹⁷ reports that it has increased to £750 million.

In addition to the need for more investment in R&D, the UK Government recognises a number of further innovation challenges:

- Turning exciting ideas into products and services and capturing their maximum value;
- Ensuring that the UK remains a world leader in global science and innovation collaboration;
- Building R&D Excellence across the UK.

NI remains relatively reliant on a small number of firms who invest in R&D with just under 40% of R&D spend concentrated in just 10 firms¹⁸. There is a major challenge in encouraging more companies, particularly indigenous SMEs to invest in R&D. The nature of the private sector in NI creates particular challenges in terms of increasing the focus of indigenous business on

¹⁶ https://www.economy-ni.gov.uk/sites/default/files/publications/deti/Innovation-Strategy-2014-2025_2_0.pdf

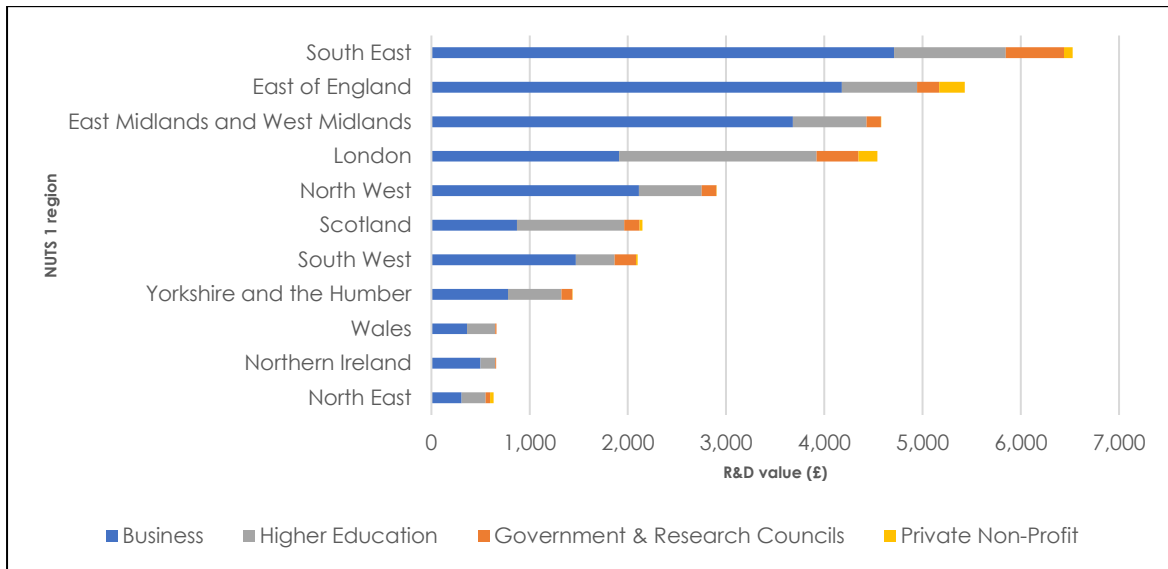
¹⁷ <https://www.economy-ni.gov.uk/articles/northern-ireland-innovation-scoreboard>

¹⁸ <https://www.nisra.gov.uk/statistics/business-statistics/research-and-development>

innovation and exports. The NI Innovation Strategy highlights the challenges for increasing investment in R&D when 95% of businesses are considered to be micro businesses.

There is also the potential for Brexit to impact on efforts to improve the Belfast Region's innovation performance. In particular, it is vital that the international research collaboration facilitated through programmes, such as Horizon 2020, is continued and facilitated post Brexit.

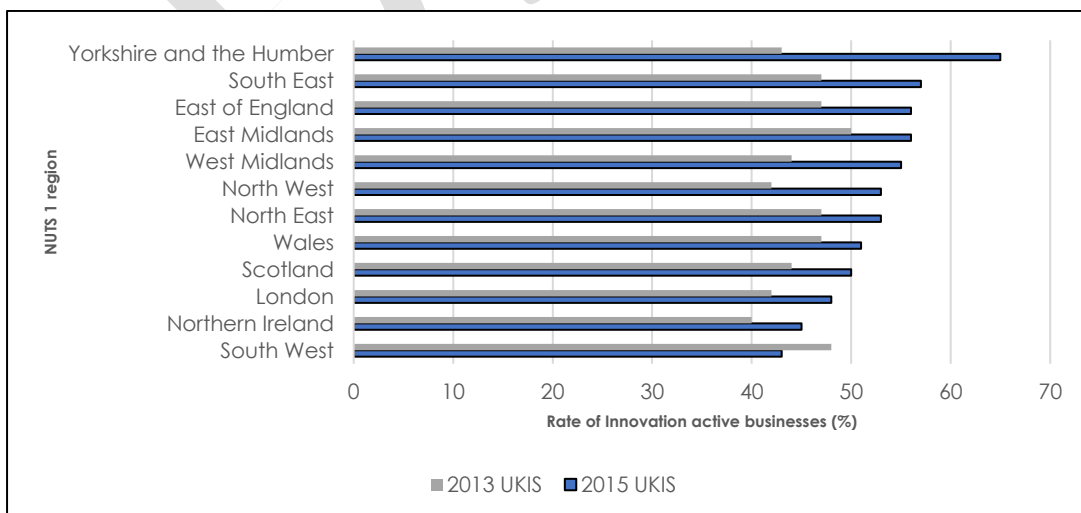
Figure 11: UK GERD (Gross Domestic Expenditure on Research & Development) by sector and NUTS 1 region, 2015



Source: Office of National Statistics

NI demonstrably lags behind the rest of the UK in terms of the number of our firms engaging in innovation. Based on the proportion of innovative firms, NI ranks 11 out of 12 UK Regions for innovation. According to the Innovation Scoreboard, this position has barely changed since 2008. In 2015, as has been the pattern over the past decade, the South East and East of England dominated R&D activity in the UK. These regions together accounted for 38% of total UK R&D (£12.0 billion).

Figure 12: Rate of Innovation active businesses by NUTS 1, 2013 and 2015



Source: UK Innovation Survey

Within the Belfast Region businesses have a slightly higher share of employment than of exports and also continue to have lower levels of entrepreneurship and self-employment than the NI average. This is a major challenge in a region which supports 60% of knowledge economy jobs and is aiming to put knowledge exploitation at the heart of its approach to the development of all priority sectors.

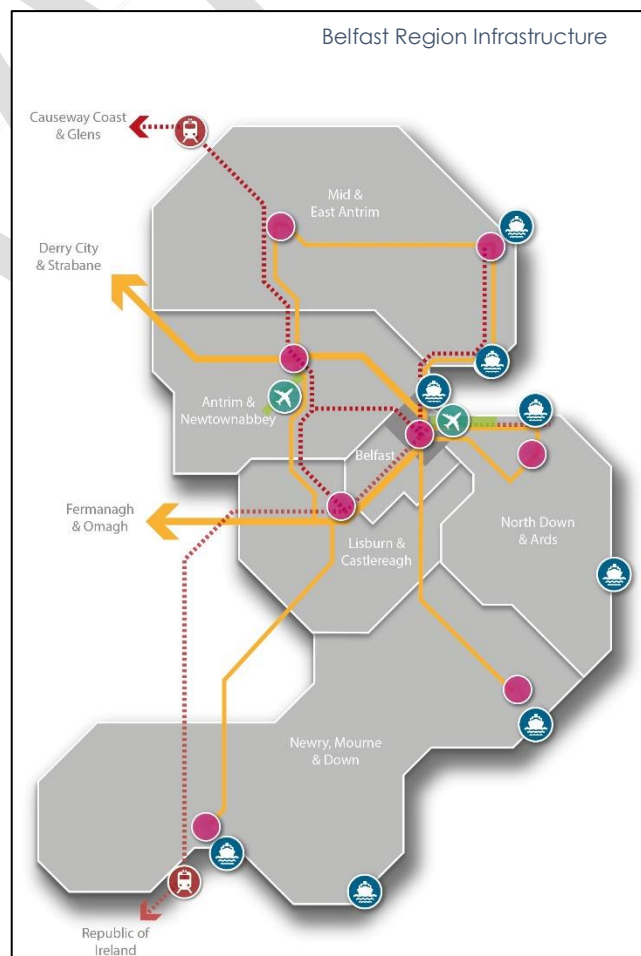
Although there is a strong research base at our local universities and some highly innovative companies, the overall level of private sector R&D is too low. This needs to be recognised and addressed through the local research institutions, who must work more widely to meet the demands and needs of the regional industrial base. This will require improved engagement between local universities and colleges and SMEs and new models of working that enable more effective exploitation of knowledge and intellectual property. The BRCD partners are committed to ensuring that new investments look beyond the traditional large companies to embed innovation across the SME base.

Infrastructure

It has never been more important for a city region to be connected and have high levels of connectivity. Investment in infrastructure is essential to facilitate and enable the growth of those businesses and sectors which have the potential to close the productivity gap. Infrastructure must ensure that the Belfast Region is connected effectively to its markets and that its people have ready, affordable access to jobs and services. Infrastructure investment can also play a key role in place-making, helping to create areas that support community health and well-being. Through its Investment Strategy, the NI Executive has sought to address a legacy of under investment in NI's infrastructure through a 10-year plan aligned to the priorities in the Programme for Government.¹⁹

However, there remain a number of legacy challenges and the BRCD partners have therefore commissioned a Belfast Region Infrastructure Investment Framework to identify strategic infrastructure priorities, aligned to the partners' vision for inclusive growth. Delivery of inclusive, sustainable growth means that such infrastructure needs to be available across the Belfast Region and the BRCD partners recognise the importance of achieving a balance of development and employment across the Region. Delivering inclusive growth also requires the efficient movement of people so that workers can access the new jobs we are delivering and visitors can access the world class visitor attractions that the Belfast Region partners are creating.

Investing in those crucial access points and our transport connections with UK and ROI markets is also vital in promoting investment and delivering growth. The UUEPC analysis on the implications of Brexit for the BRCD partners identifies the

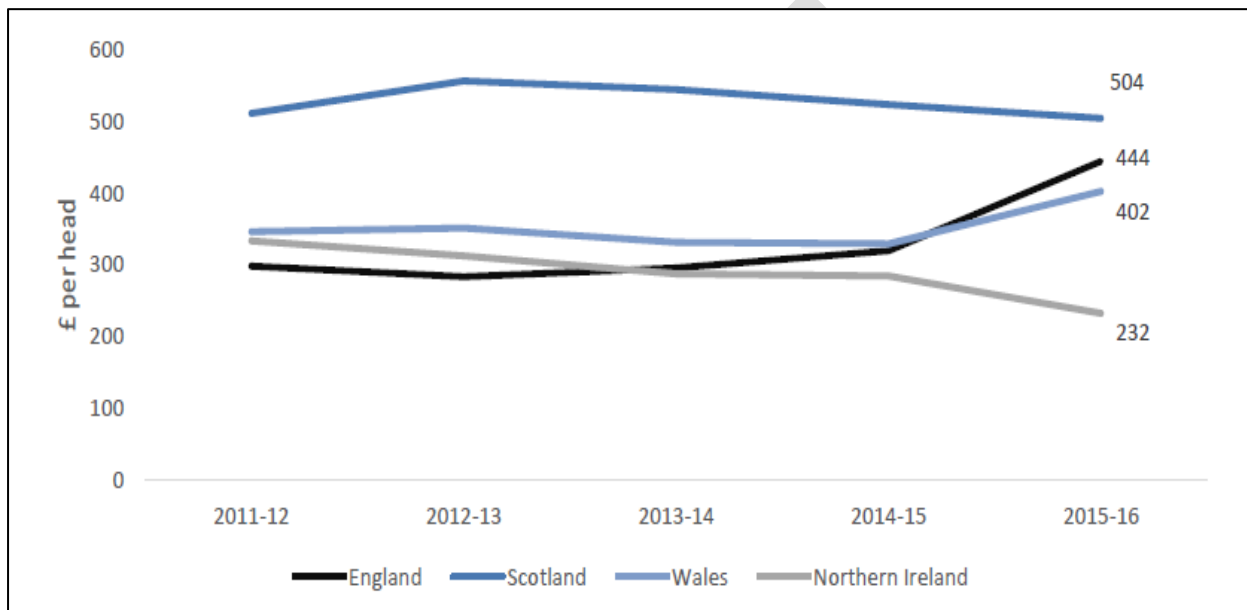


¹⁹ <http://www.isni.gov.uk/PDFs/Investment%20Strategy.pdf>

importance for priority business sectors of free movement within the island of Ireland and throughout the UK.

There has been significant infrastructure investment in many of these areas in recent years but key challenges remain. The level of investment in transport infrastructure, allied in particular with historic disinvestment in public transport, has resulted in problems of congestion and over reliance on travel by private car. Scotland's investment in transport (per capita) was more than twice as high as NI's in 2015-16 at £504, compared to £232²⁰.

Figure 13: Identifiable expenditure on transport per capita 2011-12 to 2015-16



Source: PESA Country and Regional Analysis 2016

The NI Audit Office²¹ found that "significant investment prompted by the Regional Transport Strategy has transformed rail travel with passenger journeys doubling. In contrast, total bus passenger journeys (Metro and Ulsterbus combined) between 2002-03 and 2013-14 increased by 1.5% (or 1 million journeys)". In the context of the Belfast Region it is notable that within this increase in Bus passenger journeys, Metro passenger journeys are up by almost a third. The Belfast Region Infrastructure Investment Framework identifies that transformation from a car-dominated choice of travel requires additional measures to be in place to encourage modal shift. There is a need for enhanced transport provision for local and rapid bus network provision, including issues relating to route choices, reliability and frequency of service, improved cycle routes and rail infrastructure enhancement. Improved transportation interconnectivity has also been identified as a key transport challenge. There is the potential for investment in new digital technologies and applications to play an important role in delivering connected public transport provision.

Despite this progress more than half of the city's workforce (52%) travel to work by car. This situation, allied with the constrained nature of the key routes into and out of Belfast has resulted in Belfast hitting the headlines in terms of the impact of congestion on travel times. The BRCD partners recognise that congestion has direct costs for business, results in poor air quality and can act as a disincentive to further growth and investment. Travel time and transport costs also act as barriers to people living in more deprived areas accessing education and work opportunities.

²⁰ <http://www.niassembly.gov.uk/globalassets/documents/raise/publications/2016-2021/2017/infrastructure/2117.pdf>

²¹ <http://nia1.me/3ga>

The population in the Belfast to Dublin corridor is expected to grow to over 3 million by 2031. Although the road network along the corridor has seen significant investment, there remains the potential for major improvements in the public transport connections. Critically the Eastern Corridor accounts for more than 1 million jobs and improved connectivity would help attract new investment, expand labour markets, and allow advantage to be taken of the complementarity of economic clusters.

Research²² has identified that despite significant investment and excellent progress in delivering a digitally connected Region, there remain challenges in more rural areas. Such is the importance of digital connectivity that there is a commitment to universal access to basic broadband speeds of 2Mbps. However, due to the speed of progress and importance of digital connectivity, new commitments and ambitions are being continually established.

- OFCOM has identified that a connected speed of at least 10Mbps is required for an acceptable user experience;
- the UK government has committed to a roll-out of superfast broadband so that 95% of premises have access by 2017 and to introducing a broadband Universal Service Obligation so that by 2020 everyone across the UK will have an enforceable right to request high broadband speed;
- Digital Agenda for Europe targets half of households having connection speeds of 100Mbps by 2020.

Table 2: Proportion of Northern Ireland Households with access to the internet at home by Local Government District (2016/17)

	Home Internet Access	No Home Internet Access
Antrim & Newtownabbey	83	17
Ards & North Down	86	14
Belfast	81	19
Lisburn & Castlereagh	83	17
Mid & East Antrim	84	16
Newry, Mourne & Down	79	21
Belfast Region	82	18
Urban	81	19
Rural	81	19
Northern Ireland	81	19

Source: Continuous Household Survey

Perhaps the greatest challenge in relation to digital infrastructure, given the pace of change, is maintaining and exploiting competitive advantage. This is why the BRCD partners have commissioned Future Cities Catapult to help us create a digital vision and integrated strategy for the Belfast Region. The aim is to leverage existing strengths in cybersecurity, data, software development, infrastructure and innovation to create a "world class offer in secure infrastructure and applications for the Internet of Things (IOT)".

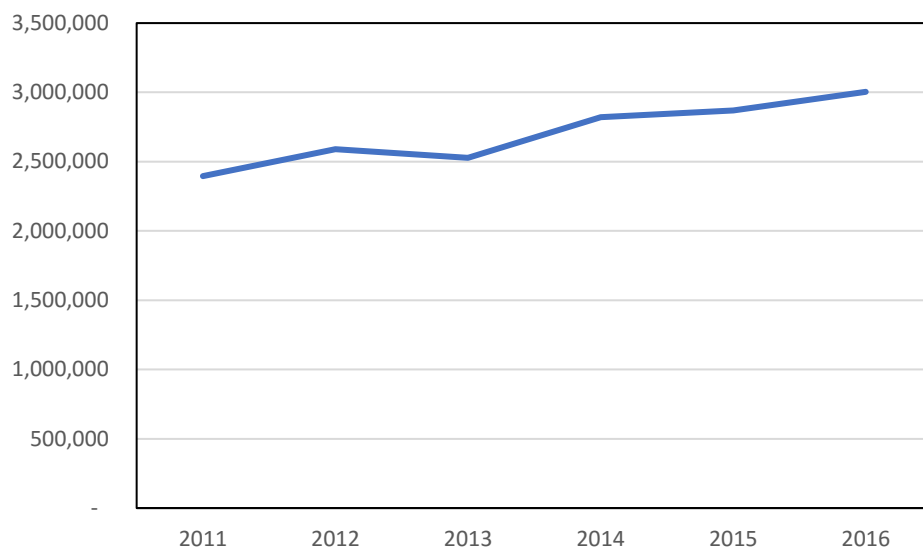
The Matrix report on the Digital Sector²³ highlights what is needed for exemplar status. *"The communications infrastructure deployed in Northern Ireland provides an excellent platform for the development of SMART government and citizen services, including health and education. To be effective, it is imperative that a proactive approach is taken to the exploitation of this digital opportunity, to make Northern Ireland a recognised exemplar region, which in turn will attract additional investment into the economy."*

²² <http://www.niassembly.gov.uk/globalassets/documents/raise/publications/2016-2021/2016/aera/6716.pdf>

²³ <http://matrixni.org/wp-content/uploads/2016/03/2016-Matrix-Digital-ICT-Report.pdf>

A further infrastructure priority for the Belfast Region is that relating to our collective commitment to growing the tourism sector. Despite many positive attributes, Tourism NI has identified that knowledge of NI and its product offering, beyond a small number of key sites, remains relatively limited in the international marketplace.

Figure 14: Estimated Number of Overnight Trips in the Belfast Region



Source: NISRA Northern Ireland Tourism Statistics

Investment continues to be required in infrastructure connections that allow easy access to the Belfast Region and new investment is needed to encourage people to stay for longer and spend more within the Region. This will require continued attention to the connections provided through our airports and seaports and their capability to enable the Belfast Region to grow from new markets and growing types of tourism.

The increasing strength of the tourism sector is also creating its own infrastructure challenges. The BRCD partners recognise that if the ambition of Tourism NI to double the value of tourism and create 20,000 jobs by 2030 is to be realised, new investment will be required to create visitor experiences that attract more overseas visitors and increase the length of their stay when they visit.

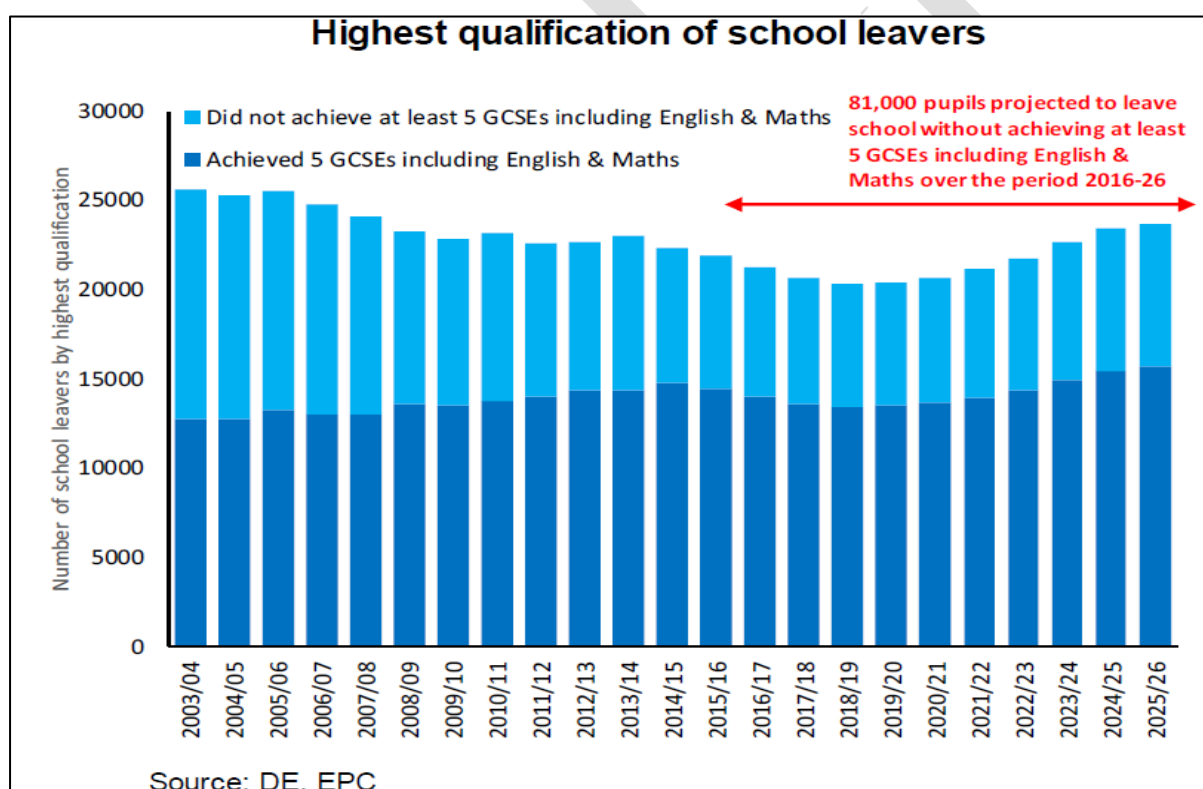
The BRCD partners also recognise that there are a number of wider infrastructure challenges for the whole of the NI Economy and are committed to working collectively and in partnership with the NI Executive and UK Government to address these. Changes to the single electricity network and investments in the transmission network across the island of Ireland will be critical elements to ensure the Region's growth ambitions are achievable. However, risks remain due to the costs of connection and supply, security of supply and sustainable energy aspects, particularly within the context of potential Brexit impacts. The suitability of wastewater infrastructure to meet current need is limited, with the need for significant investments to upgrade and increase network capacity critical to enabling economic growth across the Belfast Region. Many of the planned developments and investments to tackle growth challenges in relation to water and energy infrastructure and tackle climate change will require consideration, analysis and joint planning beyond the BRCD. **The BRCD partners are however committed to continuing such collaboration and, in particular, to investigating how use can be made of new technologies such as machine learning to deliver "SMART" Growth planning.**

Skills

The BRCD partners recognise that nothing is more important to the delivery of sustainable economic growth than the education and skills of our workforce. It's what attracts external investment into high value industries and it's what enables the growth of indigenous businesses. As will be explored in further detail below, the Belfast Region has many strengths in its education system, producing high numbers of graduates and highly skilled individuals. However, as outlined in Figure 15, projections developed by the UUEPC for the NI Skills barometer identify that without new thinking and investment the tail of underachievement will continue.

The BRCD partners recognise that it will not be possible to deliver on their ambitions for the Belfast Region without dramatically improving the skills profile of the Region. The BRCD partners have therefore commissioned Ulster University to prepare a skills barometer for the Belfast Region, enabling a responsive, analytical approach to ongoing education & skills challenges.

Figure 15: Learners achieving 5 GCSEs including English and Maths



Despite the relatively strong growth of the Region's economy, there is still a very marked polarisation of those who are well qualified and those who have no qualifications or who are low skilled. Those with no or low qualifications and low skills are more likely to come from more deprived neighbourhoods within the Belfast Region. It is also apparent from research that demand from employers for people with Level 1 qualifications is declining. In 2009, 20% of the posts advertised required qualifications below Level 2. Forecasters predict that just 11% of future posts will require qualifications below Level 2.²⁴

²⁴ <https://www.economy-ni.gov.uk/sites/default/files/publications/economy/NI-Skills-Barometer-2017-Summary-Report.pdf>

Interestingly, forecasts predict demand across NI for 6,905 individuals skilled to Level 3 per annum. However, each year only 4,529 people exit education at this point. Not addressing this may result in an undersupply of 2,376 people skilled to Level 3 per annum or conversely 2,376 people filling Level 3 posts whose skills profile is higher than the post requires.

The ambition of the BRCD partners is to develop an integrated, employability and skills model which delivers a win-win in relation to education and skills:

- **Maintaining excellence**
- **Tackling underachievement**
- **Focusing on employability**
- **Matching skills with our growth ambitions**

To take advantage of key growth sectors which rely increasingly on the use of digital technology there is a recognition of the importance of investing in education and skills in STEM subjects. Over a ten-year period from 2005, data has indicated that there has been an overall increase in the uptake of STEM at GCSE. However, the NI Skills barometer identifies that STEM, Health and Public Services, Media and ICT remain undersupplied in skills terms. Given the importance of such sectors to the Belfast Region it is vital that supply and uptake of STEM skills matches the demand that partners expect to create. It is also vital that the nature of investment avoids digital becoming a new source of educational disadvantage.

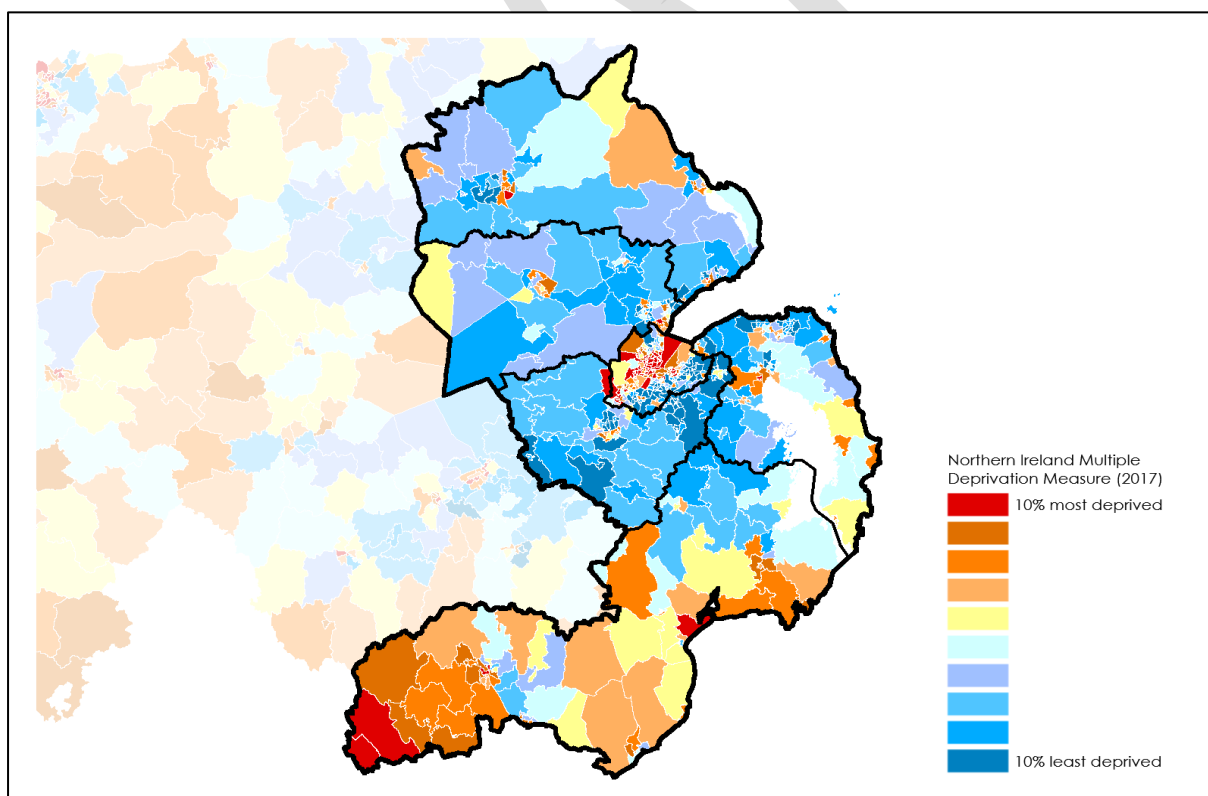
For the Belfast Region to achieve its full potential a skills pipeline is required that is responsive to the requirements of business now but which also anticipates and responds to the skills of the future. Creation of such a system will require genuine integration of systems for planning, funding and delivery by a range of partners.

5. Our Inclusion Challenge

Studies by the Centre for Cities²⁵ and the Joseph Rowntree Foundation²⁶ have examined the very significant challenges that exist for UK cities in creating inclusive growth, not least due to their limited local powers, responsibilities and financial levers compared with cities in many other developed countries. **In recognition of this challenge the BRCD partners have identified the need for extensive collaboration across government and with social and business partners to tackle persistent challenges associated with deprivation, economic inactivity, and educational inequalities.**

The UK Industrial Strategy directly highlights the growing spatial inequalities between towns and cities in the UK. The dominance of London and the South East has led to a skewed economy, where economic opportunity is determined by where people live. Rebalancing the economy represents a key challenge for inclusive growth and the development of local industrial strategies, which seek to tackle local economic challenges is an important element of both the UK and NI strategies. Growth has also been uneven within every town and city. All too often it is the 'same old places' left behind. When the fortunes of a deprived neighbourhood are improved, the challenge is to ensure that the original residents benefit. If they are unable to access the new jobs being created, the risk is that they are simply displaced elsewhere as the area gentrifies. Within the Belfast Region, despite the economic recovery following the financial crisis, high levels of deprivation persist in many locations.

Figure 16: Distribution of deprivation in Belfast Region



Belfast Mapping Data prepared by Belfast City Council based upon the Land and Property Services map with the permission of the Director & Chief Executive © CROWN COPYRIGHT 2017 NIMA No. CS & LA 156
Source: Northern Ireland Statistics and Research Agency

²⁵ <http://www.centreforcities.org/publication/funding-and-financing-inclusive-growth-in-cities/>

²⁶ <https://www.jrf.org.uk/cities-towns-and-neighbourhoods/inclusive-growth>

The Inclusive Growth Commission²⁷ recommend a new, integrated approach to inclusive growth combining social and economic policy. This approach recognises the value of place based strategies that connect people, through skills, transport and housing to quality jobs. In such an approach, it is important that investment in infrastructure responds to the requirements of deprived and isolated communities whilst seeking to support economic growth.

The BRCD partners are determined to enable as many people as possible to contribute to and benefit from growth. We believe that in order to address the long-term challenges facing the most disengaged within the Region, such as health and education inequalities, we need to focus on improving our economy and ensure that the benefits are felt by everyone.

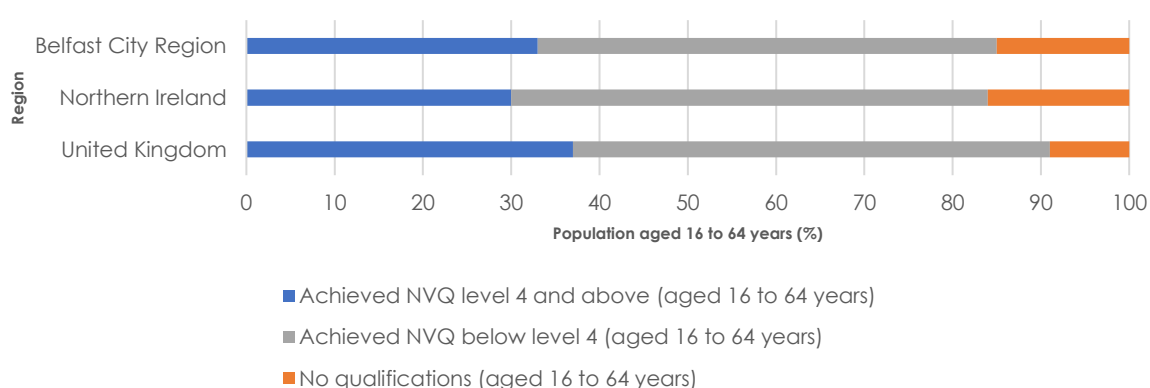
Tackling inequalities in relation to education and skills and the low level of qualifications obtained by many within the Belfast Region is at the heart of the productivity and inclusion challenge. On average, despite outperforming other parts of the UK in terms of the number of pupils achieving top grades in GCES and A-levels, 15% of the working age population have no qualifications.

Table 3: Level of Qualifications

	Working Age: Achieved NVQ Level 4 And Above ² (%)	Working Age: Achieved Below NVQ Level 4 (%)	Working Age: No Qualifications (%)
Antrim and Newtownabbey	29.4	49.7	20.9
Belfast	34.0	51.8	14.2
Lisburn and Castlereagh	37.7	49.7	12.6
Mid and East Antrim	30.2	56.8	12.9
Newry, Mourne and Down	35.0	48.9	16.1
Ards and North Down	35.6	53.1	11.3
Belfast Region	33.8	51.6	14.6

Source: LFS January-December 2016

Figure 17: Level of qualifications by region, 2016



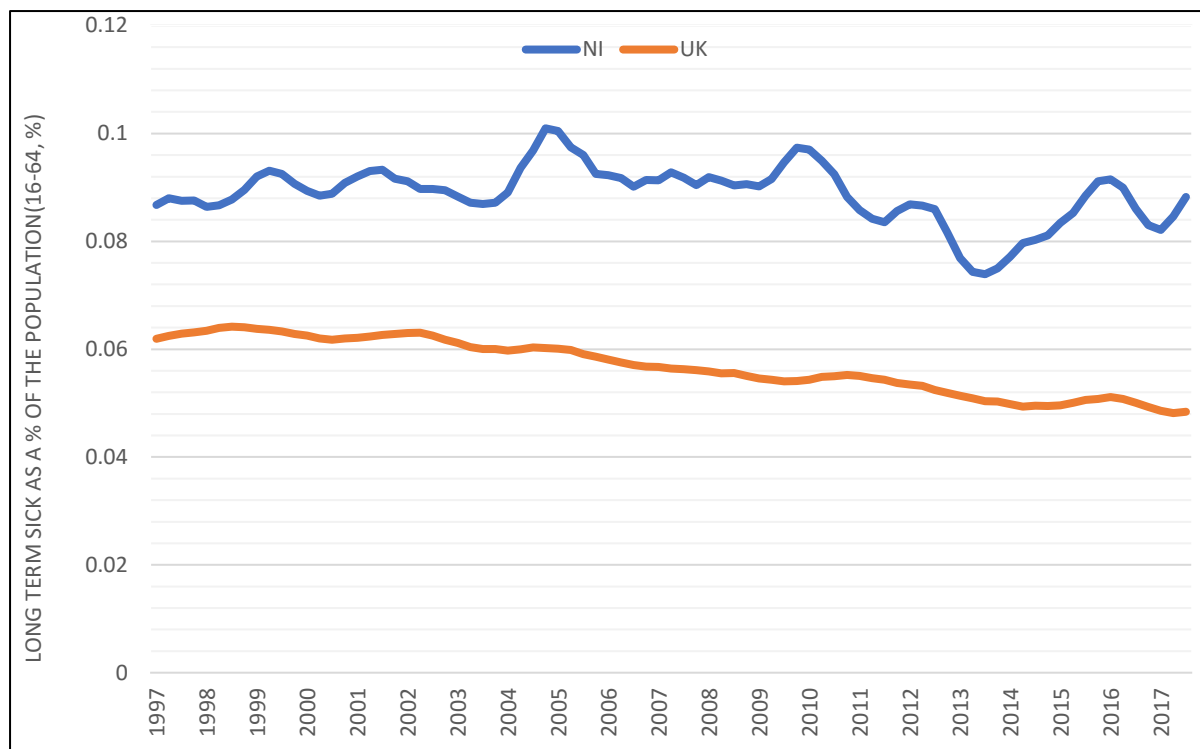
Source: Labour Force Survey

There has been considerable investment in tackling educational inequalities across NI and the proportion of school leavers not achieving Level 2 (at least 5 GCSE's A*-C) has improved considerably over the past decade falling from 37% in 2004/05 to 19% in 2014/15. Overall the

²⁷ <https://www.thersa.org/action-and-research/rsa-projects/public-services-and-communities-folder/inclusive-growth-commission>

level of qualifications in the Belfast Region is slightly lower than the average UK population but the number of people with no qualifications is twice the UK level. Economic inactivity is a persistent and tenacious issue for the Belfast Region. The economic inactivity rate for those aged between 16 and 64 in the Belfast Region has remained consistently below the UK average over the years.

Figure 18: Long term sick, UK and NI, 1997-2017 (4-quarter rolling average)



Source: Labour Force Survey

Table 4 shows that Belfast City Council and Newry, Mourne & Down District Council have the highest levels of economic inactivity within the Region, whilst Antrim & Newtownabbey Borough Council and Lisburn & Castlereagh City Council have the highest levels of unemployment. The economic inactivity rate across the Belfast Region is 26.50%, much higher than the UK average of 21.80%. Whilst the most recent unemployment rates have now fallen to historic lows, employment rates continue to lag behind other UK regions.

Table 4: Employment Statistics

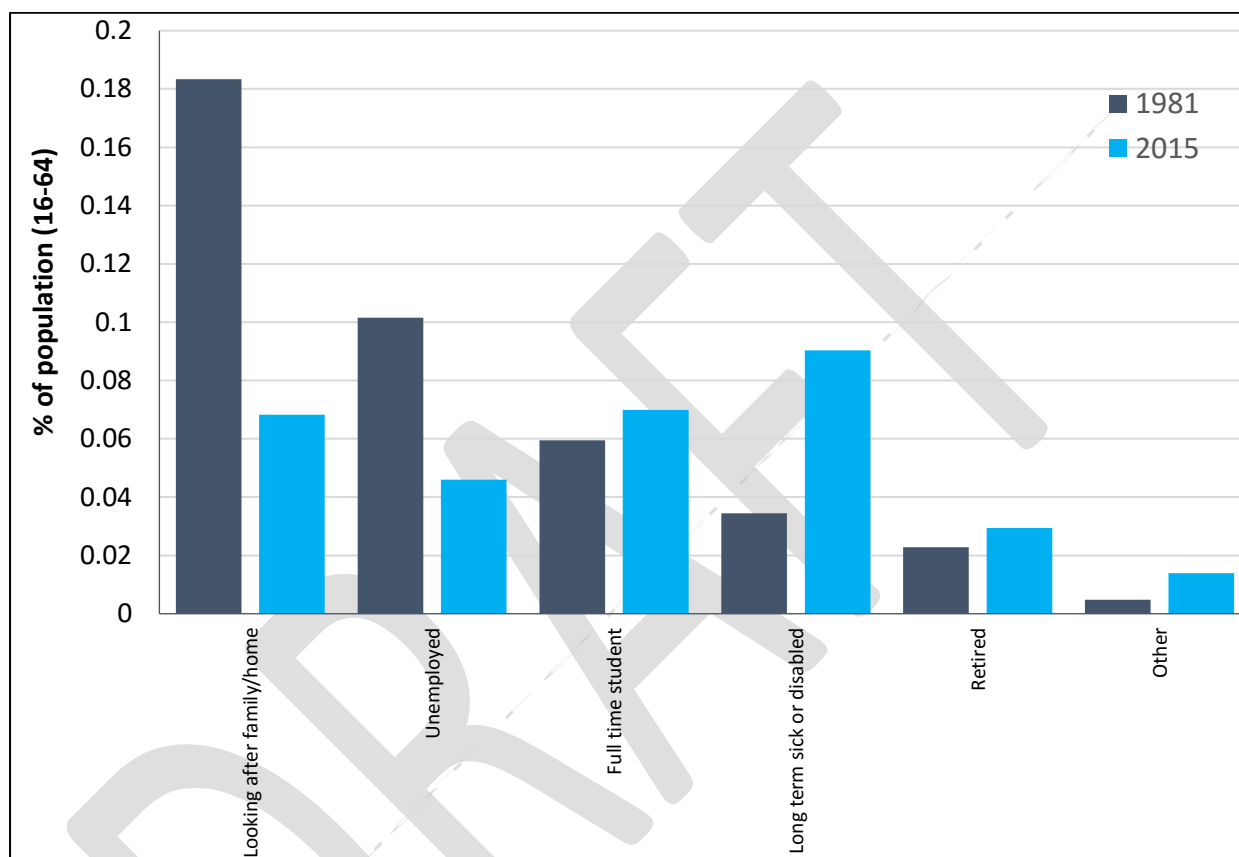
Employment statistics (2015)	Economic activity rate %	Economic inactivity rate %	Unemployment rate
Ards & North Down	77.6%	22.4%	3.4%
Antrim & Newtownabbey	75.2%	24.8%	4.5%
Belfast	69.9%	30.1%	3.5%
Lisburn & Castlereagh	76.5%	23.5%	4.4%
Mid & East Antrim	77.4%	22.6%	3.5%
Newry, Mourne & Down	70.4%	29.6%	4.2%
UK	78.2%	21.8%	5.1%

Note: (a) Economic Activity Rate is for all persons aged 16-64
 (b) Figures are for 2015

Source: (a) Regional GVA (I) by local authority in the UK, ONS
 (b) Labour Market Structure – Employment activity by local government district, NISRA

When full-time students are excluded the main groups who are economically inactive are those who are classed as long-term sick or disabled and those who are looking after family or home. In recent years in NI there has been an increase in the proportion of the population suffering long-term sickness or who are disabled. The percentages of persons who are classed as long-term sick who then return to the labour market is very low, presenting a major challenge for all those seeking to increase employment levels.

Figure 19: Workless people aged 16-64 by labour market status NI, 1981 versus 2015



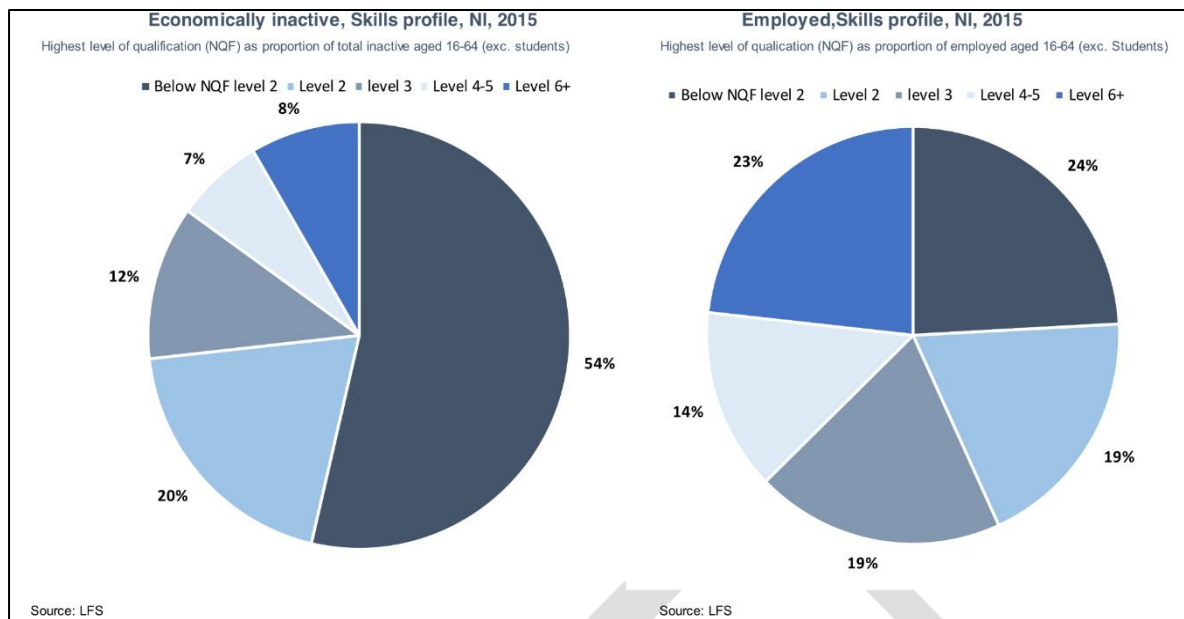
Source: Labour Force Survey

Throughout the UK inactivity rates among the female working age population are higher than for men, reflecting the much higher proportion of women who are “looking after family and home”. In NI the inactivity rate for females is approximately double the male rate at 29% and 14% respectively, compared with 22% and 11% in the rest of the UK. It is notable that the average cost of a full-time childcare place in NI represents 58% of the net income for a worker in the lowest skill's category²⁸. Given the low qualifications profile of the economically inactive population this cost acts as a disincentive to participation in the labour market.

UUEPC in their report on economic inactivity identified the wide range of challenges in moving those who are inactive into employment. The low level of skills possessed by many represents a major barrier, with over 54% of those who are economically inactive having failed to obtain 5 GCSEs aged grade A-C. In addition to presenting a direct barrier to accessing employment, the lower level of wages and lower security of employment associated with many lower skilled jobs may act as a disincentive to moving off benefits and into employment.

²⁸ https://www.ulster.ac.uk/data/assets/pdf_file/0004/181435/UUEPC-Inactivity-Discussion-Paper-Final-Report.pdf

Figure 20: Skills profile of economically inactive and those in employment 2015



Enabling Success²⁹ is the cross-government strategy for tackling economic inactivity in NI and identifies individuals with work health conditions or disabilities, lone parents and individuals with caring responsibilities as the key target groups for support in overcoming their "personal labour market" barriers. The Strategy recognises the challenges of moving people who have been inactive into employment. Someone who has been unemployed for less than 3 months is more than 3 times more likely to return to employment than someone who has been unemployed for more than 2 years.

The BRCD partners have agreed that equipping people with the skills necessary for employment will be fundamental to their industrial strategy. However, they also recognise that to tackle economic inactivity and improve productivity the focus must also be on working with a range of partners on employability and ensuring that the specific support necessary to move people into employment is improved across the Belfast Region. Traineeships and apprenticeships are recognised as being critical to improving the opportunities for lower skilled workers to acquire skills to enter the labour market and to progress through to achieve higher paid jobs.

²⁹ <https://www.communities-ni.gov.uk/sites/default/files/publications/del/enabling-success-economic-inactivity-strategy.pdf>

6. Competitive Advantage: Building on Our Strengths

Despite the long-term challenges identified in this framework, the BRCD partners consider that through collaboration, investment and an integrated, strategic approach which seeks to maximise the very real strengths of the Belfast Region, there is the potential to make a seismic shift in the economic performance of the Region. This will involve playing to our existing sectoral strengths, focusing within sectors on the potential to maximise wealth generation and building on the investments in telecommunications and digital which have placed us ahead of many of our competitors. It will also require us to focus on:

- maximising the alignment between our investments in delivering a highly educated and skilled population with the requirements of the next generation of jobs; and
- moving rapidly to convert the high numbers of people with low or no skills into skilled assets for the economy of the future.

Our Competitive Advantage: Sectoral Strengths

Economy 2030 highlights the importance of promoting and enhancing niche areas and sectors where NI may have a competitive advantage and where NI could be world class. The Belfast Region has many strengths across these sectors and the BRCD partners are working with our government partners, universities and further education institutions and our market leading companies to convert these strengths into sustainable growth. The BRCD partners, and indeed many of the respondents to the consultation on Economy 2030, have also identified the potential for employment growth in the tourism sector and recognise the potential to invest in infrastructure and skills to both grow the sector and to get more people into jobs.

The broad sectors identified as being key strengths for the Belfast Region are:

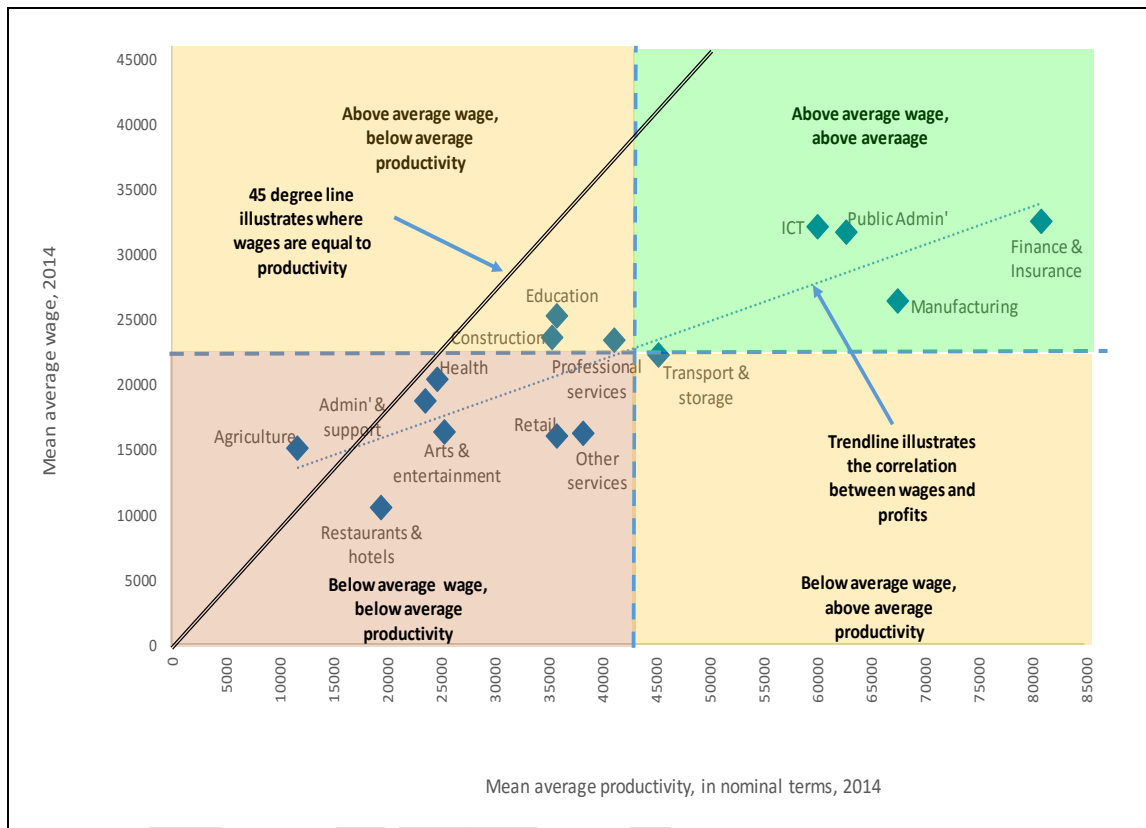
- **Financial, Business and Professional Services**
- **Digital and Creative Technologies**
- **Advanced Manufacturing, Materials and Engineering**
- **Life and Health Sciences**
- **Agri-Food**
- **Construction and Materials Handling**
- **Tourism**

The work of the MATRIX Panel provides a robust evidence base, at a more granular level (see infographic below) for a number of these sectors, of current and future market opportunities where NI already has competitive advantage and, importantly, has capacity and capability to compete successfully in global markets. Matrix is also currently undertaking studies in relation to the interface between technology and creativity and NI's capability in AI.

ICT	Life & Health Sciences	Advanced Manufacturing, Materials and Engineering
Cyber Security	Clinical Trials	Materials Handling
Data Analytics	Digital Health	Polymers
Application Software	Precision Medicine & Diagnostics	Aero, Defence, Security & Space
Advanced Networks & Sensors		Automotive
		Agri-Engineering
		Construction Products

Figure 21 from the UUEPC report on productivity in NI explains how some of these growth sectors provide particular opportunities for wealth generation, delivering high levels of productivity and wages. A key element of the BRCD partners' strategy for the Region is to support the development of such sectors through investment in support for innovation, infrastructure and skills.

Figure 21: Comparison of sectoral productivity and wages NI 2014



Sources: Annual Survey of Hours and Earnings, Regional Accounts, ONS Productive jobs & UUEPC analysis
 Note: Some sectors are excluded for a range of reasons. Mining and those Employed by Households are excluded as they are small sector and therefore mean wage data is not published. Utilities, Water Supply & Waste are not included as they are highly capital intensive sectors focused on infrastructure. Real estate is excluded as data is driven to a large extent by imputed rents in addition to wages and profits.

The Connect report on the Knowledge Economy in N. Ireland in 2017 found that:

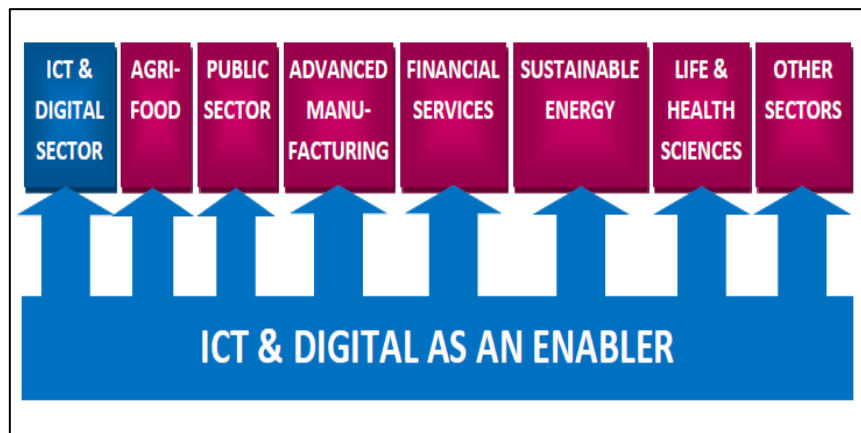
- NI is the 2nd fastest growing UK Knowledge Economy (KE) region for 4th consecutive year;
- KE export sales reached a new high – 1/3 of total NI output;
- KE accounts for 33% of NI exports, 80% of which are outside EU, where a strong North American market accounts for 56% of non-EU exports;
- KE new business creation is at all time high.

The fact that strong exports and GB sales are pivotal to positive economic outcomes for NI, with £4 out of every £5 of knowledge economy sales in 2015 generated outside the EU, also emphasises the importance of the Knowledge Economy in responding to the challenges of Brexit.

However, transforming the economy of the Belfast Region will require much more than growing our high value wealth generating sectors. The level of productivity even within priority sectors can range significantly. The foundations of productivity in relation to investing in knowledge and ideas and the translation of these ideas into business products and services must be at the core of the approach to the BRCD.

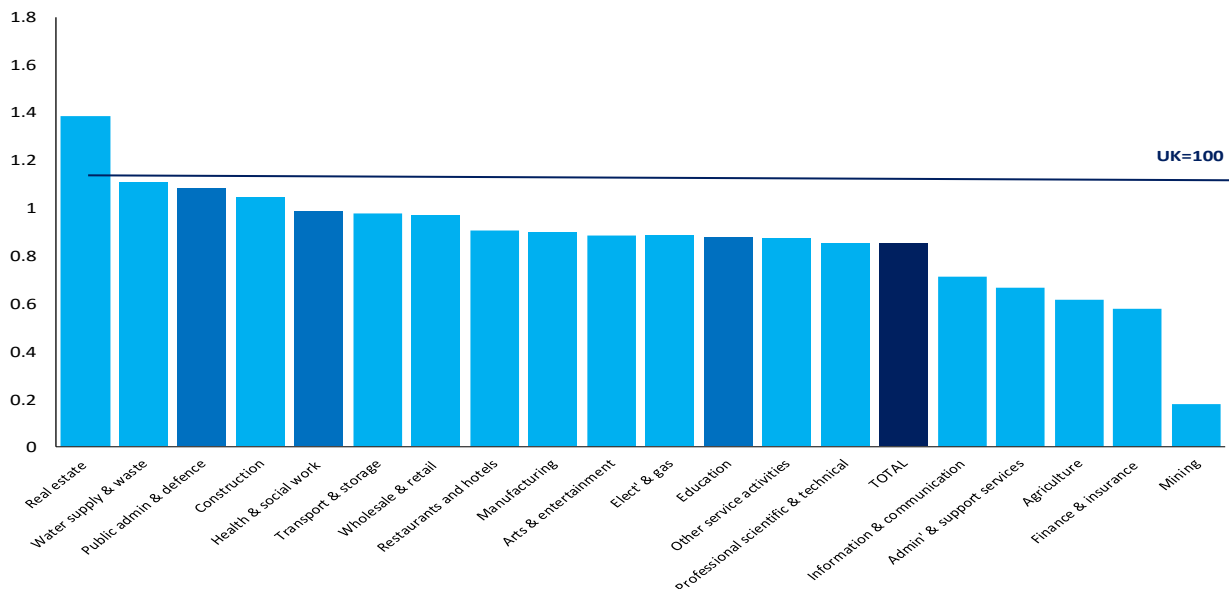
As demonstrated in the figure below, the recent Matrix Digital ICT Report, as well as examining the potential for growing this sector also emphasised the increasingly important role of digital within all industries. As an example of this, it is predicted that within 20 years, 90% of all jobs will require some element of digital skills. Productivity can be improved across all sectors through the application of new digital technology. For example, the application of new technologies to create a “smart factory” has the potential to deliver productivity increases of up 8% within the manufacturing sector³⁰.

Figure 22: ICT & Digital as both a sector and an enabler



The Centre for Cities³¹ has completed detailed benchmarking of the performance of city regions and has identified the wide variation that can exist in the productivity of the same sectors between city regions. A key reason for this is that some regions attract more of the higher skill, higher value parts of specific industry sectors. As the table below shows, even within productive sectors, such as Information and Communications, NI productivity is significantly lower than the UK average.

Figure 23: NI sectoral productivity relative to the UK in nominal terms, 2014 UK=100



Sources: ONS regional accounts, ONS productive jobs, workforce jobs, & UUEPC analysis

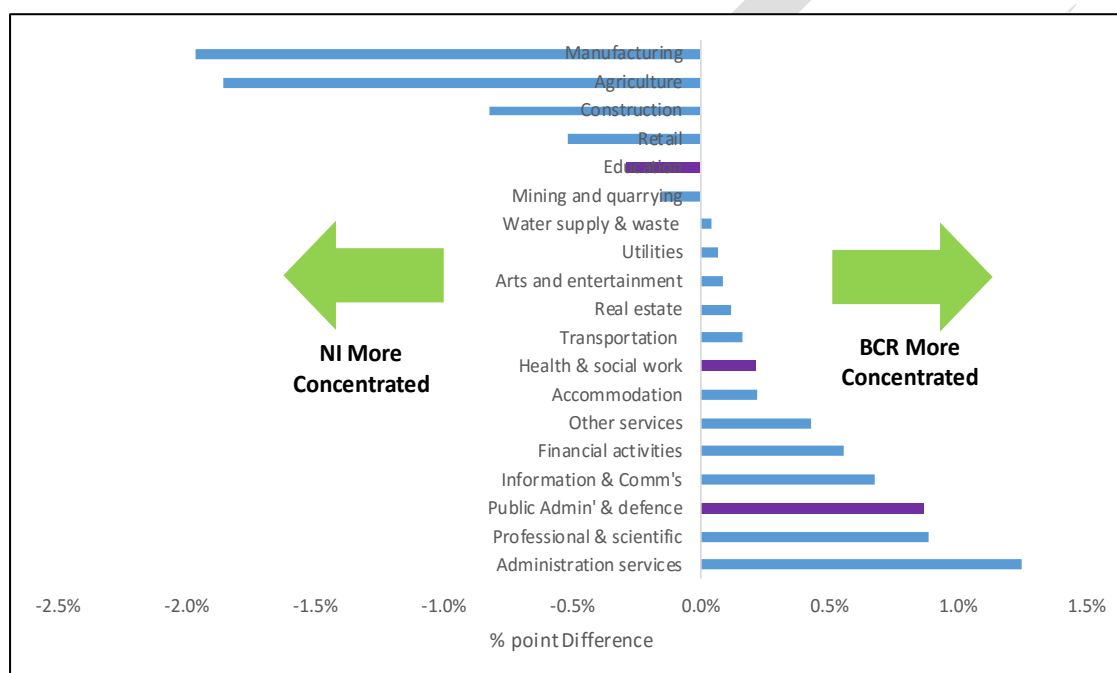
Note: Workforce jobs sectoral composition applied to productive jobs totals as per ONS consultation and guidance

³⁰https://www.bcg.com/publications/2015/engineered_products_project_business_industry_4_future_productivity_growth_manufacturing_industries.aspx

³¹<http://www.centreforcities.org/city-by-city/>

Access to the required knowledge and skills is identified by Centre for Cities as being the key to attracting and retaining the higher value jobs within sectors or indeed the higher value jobs within large multi-national businesses, who often provide both very high skill/value jobs, such as financial investment and lower value positions, such as call centres, in different regions of the country. The work of Centre for Cities has also highlighted the importance of city regions developing a greater export focus. Traditionally businesses within the service sector have been less likely to export than those within the manufacturing sector, but the growth in service sectors as a proportion of the economy, and their importance to the Belfast Region, means that overcoming the productivity challenge will require those growing service sectors to establish a stronger export focus.

Figure 24. Employment Sectors Concentration, Belfast City Region vs. NI, 2016



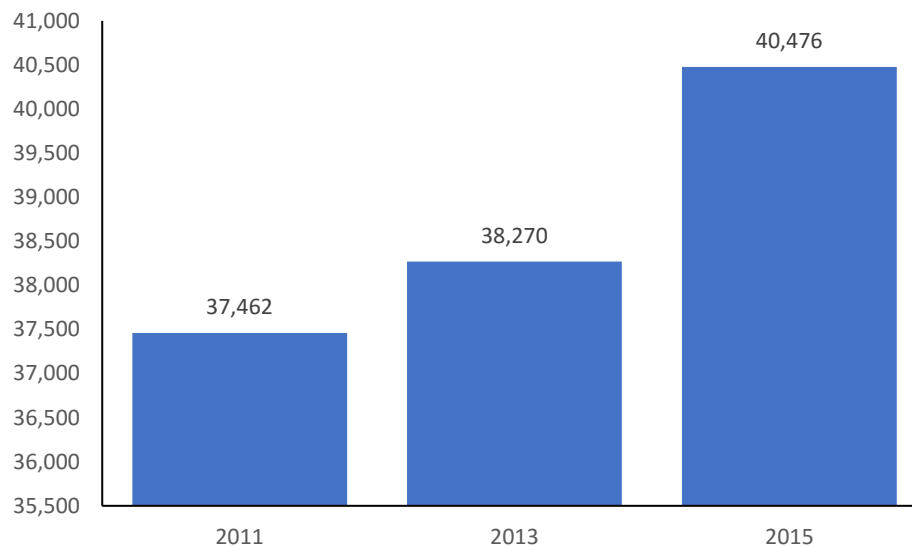
Source: UUEPC analysis

The BRCD partners have a vision of creating more and better jobs. High value-added sectors such as professional services and ICT are still relatively small in total employment terms. However, due to the extensive growth potential of these sectors, as outlined in figure 5, they are forecast to deliver the greatest level of job growth in the Belfast Region over the next 10 years. UUEPC identified that the administration and support services, health and restaurants and hotels sectors represent the next largest sectors with regard to job growth. The construction sector has also developed an export focus in recent years and this is also an area of projected growth for the Belfast Region.

Tourism is a global growth sector and overseas visitors to the island of Ireland has grown by +8.8% in 2016, faster than both the World (+3.6%) and Europe (+1.6%), for a fourth year in a row.³² The Belfast Region has benefited considerably from such growth with the addition of 14,000 jobs in recent years. The BRCD partners consider that the sector presents continuing opportunities in terms of both job growth and inclusion.

³² <https://www.tourismireland.com/Research/Visitor-Facts-Figures>

Figure 25: Tourism Jobs in the Belfast Region



Source: NISRA Northern Ireland Tourism Statistics

Responding to the Grand Challenges

The BRCD partners recognise that there are major trends shaping the future of all businesses. The UK Industrial Strategy identifies four grand challenges to put the UK at the forefront of the industries of the future. These are:

- AI & Data Economy
- Clean Growth
- Future of Mobility
- Ageing Society

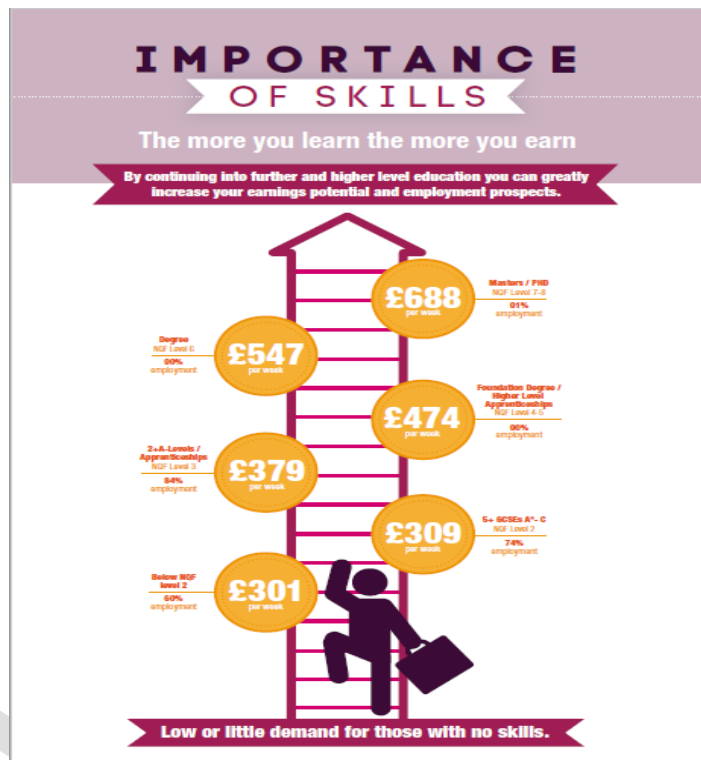
If businesses within our growth sectors are to maintain competitive advantage they will need to consider how to respond to the threats and opportunities associated with these challenges. For example, what investments are required to take advantage of the opportunity of 1.9 million jobs in the UK that will relate to robotics by 2030 and avoid the threat to jobs with low skill requirements from automation? What products and services can be created in response to the public and regulatory demands that are driving the growth of the circular economy? How can digital technologies and the Internet of Things be utilised to support good personal health in an increasingly health conscious population and support and improve the quality of life of an ageing population?

The BRCD partners recognise that for our growth sectors to achieve their full potential, investment is required now in research, innovation, systems and people that will equip and enable our businesses to take the opportunities being created by our rapidly changing society and the new capabilities that are being developed through the knowledge economy.

Our Competitive Advantage: Education & Skills

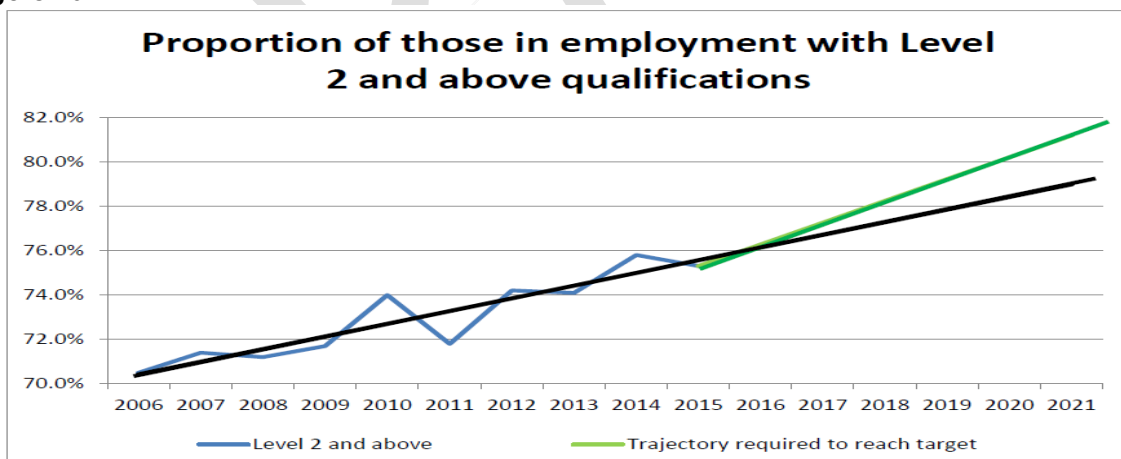
Understanding the resource endowments provided by the local labour market is an important element of assessing the competitiveness of the Belfast Region. The size, skill profile and capacity of labour pool will be of significant interest for any potential investor. Investment in education and skills is a central tenet in securing the competitiveness of the City Region.

Research illustrates that while NI's relative competitiveness has improved marginally over the past five years, education and skills and employment and labour supply were the only two pillars in which NI's relative performance deteriorated.³³ It is important to invest in skills for both economic and social reasons: higher skilled individuals can lead to more productive companies and increase the attractiveness of the Region as a place to do business – while for an individual improved skill levels improves access to employment and reduces social inequalities. In terms of productivity and wage levels, the value added from increasing knowledge and skills is clear for all to see.



There is an undoubted strength within the NI economy in relation to the percentage of young people achieving high marks at GCSE and A-Level and obtaining Level 6 (degree level) qualifications. In 2016/17 students at NI higher education institutions obtained 16,145 qualifications - 61% obtained a first degree, and 29% obtained a postgraduate qualification³⁴. There has also been progress in increasing skills at all levels.³⁵

Figure 26



Source: NI PfG Delivery Plan

The BRCD partners have commissioned a skills barometer for the Region to give a granular understanding of how we will future proof our skills base and will be aligned to the NI skills barometer. This will enable the BRCD partners to develop a collaborative response to ensure that we deliver both:

- the skills necessary to ensure inclusion in the labour market by those who are currently struggling to either access it for the first time or to get back into work;

³³ <http://eagni.com/wp-content/uploads/2016/08/UUEPC-Northern-Ireland-Competitiveness-Report-2016.pdf>

³⁴ <https://www.economy-ni.gov.uk/publications/qualifications-gained-uk-higher-education-institutions-northern-ireland-analysis-201617>

³⁵ <https://www.economy-ni.gov.uk/publications/success-through-skills-transforming-futures-0>

- **the skills required to attract investors and fill the jobs that we plan to create in our growth sectors.**

The NI Skills Barometer³⁶ concludes that there will be 80,400 additional posts to be filled each year until 2026. 51,800 of these jobs will be replacement jobs and will be filled from churn within the existing labour market. These post-holders may require support to reskill or upskill. The remaining 28,600 will be filled from the education sector and, or from migration.

The 28,600 new posts will require the following skills profile:

- L6+ (Degree level and above) = 8,700
- L4-5 (HND/ Foundation Degree level) = 3,352
- L3 (A-Level equivalent) = 6,905
- L2 (GCSE equivalent) = 6,403
- ≤L1 = 3,197

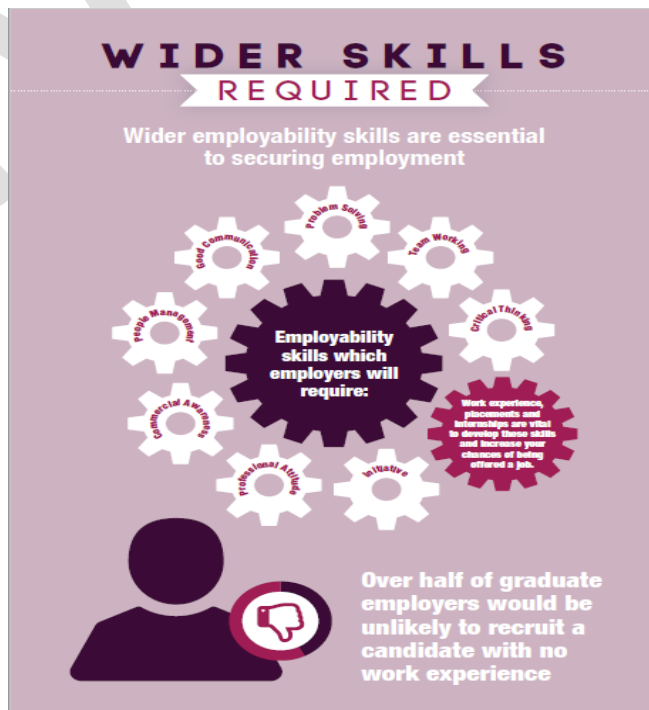
Over a ten-year period from 2005, data has indicated that there has been an overall increase in the uptake of STEM at GCSE. However, the NI Skills barometer identifies that STEM, Health and Public Services, Media and ICT remain undersupplied in skills terms. The Barometer also emphasises that employability skills are increasingly required by business, especially in knowledge based/ service industries.

BRCD partners recognise that tackling skills and employability issues requires long-term investment, resource and commitment from multiple partners. There is a need for interventions and programmes to be planned and coordinated at a local level to ensure they are relevant to local people and places, connecting to those who are furthest from the labour market and able to reach out to businesses to promote progression pathways.

There are already many examples of more integrated, responsive programmes that seek to bring people into the labour market through traineeships and apprenticeships that are designed and delivered in partnership with local businesses. Throughout the Belfast Region, Councils and Colleges are working with businesses and local partners to achieve efficiencies through economies of scale, to understand, anticipate and respond to the local labour

market and the skills local employers actually need. However, a step change is required. It is essential to empower people to access advice and support to develop skills; support and work with employers to understand their needs; to create a more coherent approach to enable individuals and employers to access skills and to strengthen collective responsibility that focuses on achieving inclusive economic growth that benefits all residents. Tackling skill barriers and other barriers to employment is essential if social inequalities are to be addressed and if economic opportunities are to be opened up to all in society.

While many of the policy threads necessary to deliver our education and skills requirements lie with central



³⁶ <https://www.economy-ni.gov.uk/sites/default/files/publications/economy/NI-Skills-Barometer-2017-Summary-Report.pdf>

government – the regional partners must ensure that the economic growth potential of the Belfast Region is not constrained by poor skills levels or a lack of available workforce. In parallel with this, it is vital that the impact of the BRCD reaches those most marginalised within the Region – inclusive growth through education, employment and skills must be delivered.

The BRCD partners recognise that they must work to ensure that there is a focus on;

- **raising the skills level of the whole workforce – providing skills acquisition across all skills levels;**
- **raising productivity – by ensuring proper skills utilisation within the workforce;**
- **increasing levels of social inclusion by supporting those furthest from the labour market to access jobs and become economically active; and**
- **meeting the skills needs of employers and better matching of supply and demand for skills.**

Our Competitive Advantage: Research and Innovation

The aim of the NI Innovation Strategy is that *“Northern Ireland, by 2025, will be recognised as an innovation hub and will be one of the UK’s leading high growth, knowledge based regions which embraces innovation and creativity at all levels of society.”* The Strategy seeks to create an innovation culture with a focus on creating a society that generates, exchanges and exploits knowledge to increase the number of companies engaging in innovation, collaboration and export. The Strategy also seeks to retain a strong focus on innovation through the innovation scoreboard, which monitors and reports on key indicators, as well as highlighting innovation success stories.

There is a strong relationship between firms that export and the level of innovation activity. Broad economy and export statistics reveal that external sales (sales to markets outside NI) rose by £967 million (4.2%) to £24.1 billion, and accounted for over a third of total sales in 2016 (35.0%), though it should be noted that devaluation of the pound has been an important contribution to export growth since the outcome of the Brexit Referendum.³⁷

The NI Executive identified that delivery on the Innovation Strategy will require:

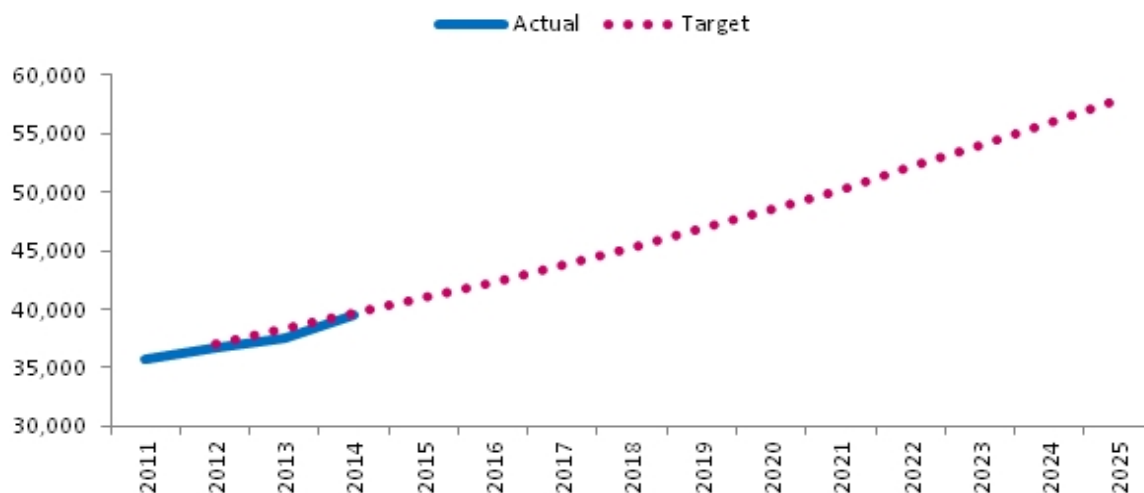
- Many more of our companies engaging in innovation, collaboration and exporting;
- Doubling the number of knowledge economy businesses and increasing their employment to over 54,000; and
- Expenditure of over £1.2 billion per annum on R&D.

There has been some progress in improving innovation within N. Ireland, though limited progress in closing the gap with the rest of the UK. Comparisons between the 2013 and 2015 surveys indicate that the proportion of firms in NI engaged in innovation activity have increased over the period. Approximately two-fifths (40%) of businesses were innovation active in 2010-12, rising to 45% during 2012-14.

Figure 27 shows that the growth in the NI Knowledge Economy is on target. Within the Belfast Region, we have a thriving digital technology sector and a lively and diverse innovator community. We are increasingly recognised as a global centre of excellence in areas such as cyber-security, data analytics, and Internet of Things technologies. We are an international hub for Connected Health and technologies for supported living and a node for the UK Digital Catapult.

³⁷ <https://www.nisra.gov.uk/statistics/business-statistics/broad-economy-sales-and-exports-statistics>

Figure 27: Knowledge Economy Jobs in NI- Projections and Actual

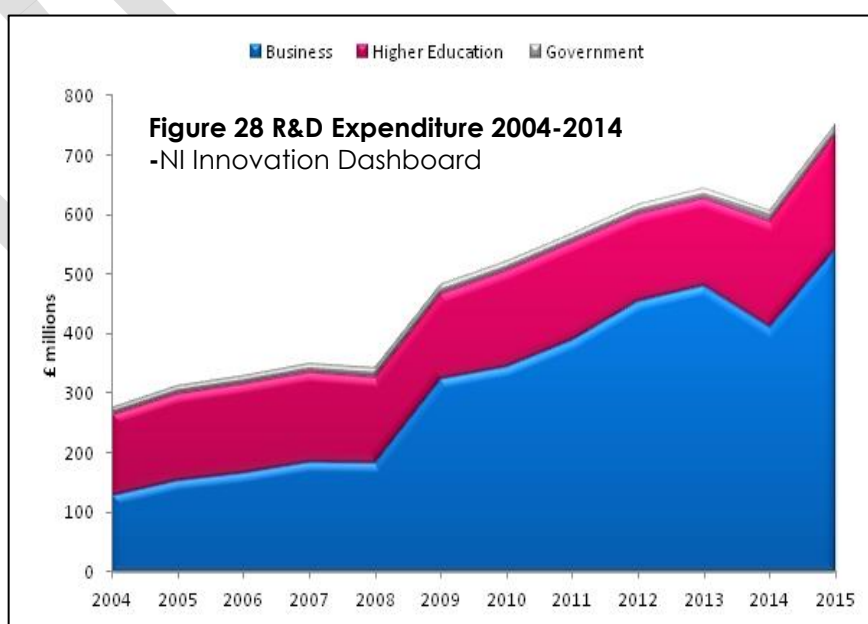


Source Matrix NI Innovation Report

Matrix, the NI Science Industry Panel, is playing a key role in advising both government business and academia on the commercial exploitation of R&D science and technology in NI and is an important source for the BRCD partners in determining its solutions to the Innovation Challenge. **The BRCD partners recognise that one of the key strengths which will be at the core of our progress, is our universities sector. It is these assets that have attracted major employers to the Region to take advantage of the knowledge, expertise, facilities and research base.**

Our two universities, Queen's University Belfast and Ulster University, have a combined student population in the Region of over 40,000, providing a skilled and creative talent pool. Both Queen's and Ulster have world class research strengths in support of our growth sectors.

For example, in the most recent Research Excellence Framework (2014), over 75% of research at Queens University was rated "world-leading" or "internationally excellent". Queen's as a whole ranked 8th in the UK for Research Intensity (Times Higher Education), and 9th in the Times Higher world rankings for international collaboration. The University's research base continues to grow with over £100m of new research awards in 2016-17. The Global Research Institutes are Queen's flagships for interdisciplinary research in areas of major societal challenge. They bring together a critical mass of excellent researchers from a wide range of disciplines in world-class facilities to tackle some of the greatest global issues of our age.



- Helping societies emerging from conflict resolve lingering differences and reconcile the challenges of justice, peace and security - The Senator George J. Mitchell Institute for Global Peace, Security and Justice.
- Working to ensure everyone has access to safe, nutritious food when the global population is growing faster than ever - Institute for Global Food Security.
- Dealing with the challenges of collecting, storing, securing and analysing the torrent of digital data we are all generating - Institute of Electronics, Communications and Information Technology.
- Tackling cancer, respiratory conditions and eye disease that affect populations worldwide, ensuring clinical advances can help fight a range of conditions - Institute for Health Sciences.

Through Pioneer Research Programmes, Queen's also stimulate novel interdisciplinary research collaborations to tackle challenges emerging on the global horizon. The current portfolio includes early intervention work with children and families to prevent social problems that emerge in later life, development of advanced technologies for drug delivery and medical devices, and creation of autonomous manufacturing systems for the factories of the future.

Ulster University is currently in the top 25% of UK Universities for research power and 72% of its research activity, in terms of outputs, impact and environment, is judged to be world-leading or internationally excellent. It is one of the top five universities in the UK for world-leading research in law, biomedical sciences, nursing and art and design and one of the top 10 universities in the UK for built environment, biomedical sciences, art and design and nursing research.

In 2017, Ulster University launched a £20 million Creative Industries Institute to drive further growth in the creative industries sector, which contributes £1 billion GVA to the NI economy and employs around 26,000 people. Ulster also launched a new Cognitive Analytics Research Lab (CARL) to deliver world-class cognitive analytics research capability. CARL will consolidate this expertise into one centre and grow over the next 5 years to become a 200 person world-leading centre of excellence in Cognitive Analytics, attracting international experts in the global research community to achieve world-leading research.

Ulster University's Legal Innovation Centre, the first of its kind in the UK, builds upon advances in computer science to build systems which allow stakeholders in the legal domain to connect and collaborate more efficiently. The Nanotechnology and Integrated Bio Engineering Centre (NIBEC), is a world class complex based at Ulster University with numerous collaborations throughout the world. NIBEC offers leading edge research and development facilities to enhance the potential for growth in a range of expanding markets, including healthcare, electronics and clean water technology.

Both universities support successful commercial spin outs and encourage Knowledge Transfer Partnerships (KTPs) with business. They are also part of the Catalyst Inc which supports knowledge based businesses and early stage entrepreneurs.

In a recent independent report³⁸ for the Department for Business, Energy, and Industrial Strategy Queen's was placed in a unique high-performing cluster of four Universities, alongside Oxford and Cambridge, for its commercial impact. The report reflects the performance of Queen's and Qubis Ltd in:

³⁸ [RSM Pacec Ltd Research into issues around the commercialisation of university IP.](#)

- Having created 80 high tech companies in NI, 50 of which still operate, having a collective turnover in excess of £123m, placing Queen's 5th amongst all 120+ universities for the highest aggregate turnover from its portfolio companies;
- Generating over 2000 knowledge economy jobs.

As well as creating high paying, high exporting jobs, this activity has attracted over £88.8m in equity investment, much of this external to NI. This is a significant investment in the NI Knowledge Economy and start-up scene, and places Queen's in the top 13 Universities in the UK for investment activity.

Ulster University seeks to share knowledge to revolutionise industry and consistently rank in the top 5% of KTPs in the UK having managed around 220 successful KTPs since 1995, which have generated more than £22m in funding for business expansion.

The BRCD partners also recognise the potential for the public sector to support the development of a strong innovation ecosystem within the Region. The NI Innovation Strategy highlights the role of the Small Business Research Initiative in de-risking innovation and research and development for local small businesses, "helping them bring through products to market and at the same time improve public services". It also recognises the increasing potential for social innovation in bringing about systemic change in "resolving some of the most intractable social problems, whilst simultaneously having an impact on employment, knowledge retention and export capacity."

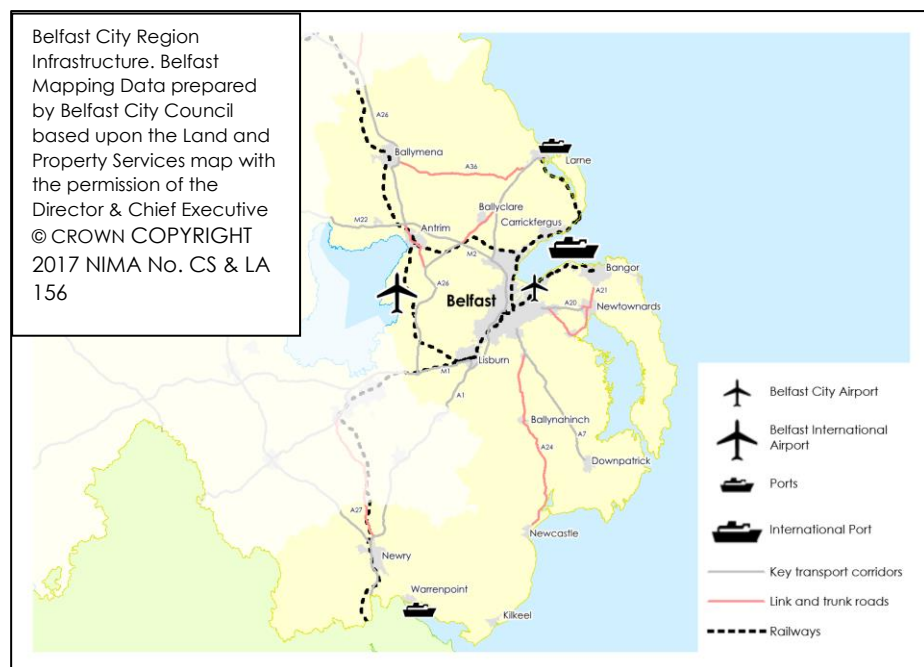
Innovation skills are also an increasingly important focus for the four Further Education Colleges operating across the Belfast Region, which had a combined enrolment in 2016 of almost 100,000. The Employer Support Programme, Innovate Us, is funded by the Department for the Economy and is delivered across NI by the six Further Education colleges. The aim of the programme is to promote, encourage and facilitate collaborative working between business and Further Education colleges, in order to provide SMEs with the opportunities to acquire the skills necessary to engage in innovation activities and R&D.

The Department for the Economy have been working with colleges to develop Regional Hubs within Further Education Colleges. This involves the designation of a college as the central hub in an occupational area by the Department for the Economy thereby ensuring structured, consistent, coherent, high quality delivery of curriculum advice and development, continual professional development, economic engagement, and communication.

Despite the significant research strengths in key sectors, the overall levels of productivity and innovation demonstrate the need for further investment in the business infrastructure which enables and facilitates innovation, collaboration and knowledge exchange and the development of our growth clusters. Critically this investment must continue at a level that allows us to compete with our local and global competitors. With the support of Future Cities Catapult, the BRCD partners have identified exciting opportunities to build on the research and innovation strengths in the Region by establishing innovation hubs and testbeds that would allow businesses to experiment with new products and services in a live, but secure environment.

Our Competitive Advantage: Infrastructure

The Infrastructure of the Belfast Region is being positioned to effectively grow its priority sectors. The Region is the logistics hub for NI with two airports and the sea ports of Larne, Belfast and Warrenpoint. Belfast International Airport runs daily scheduled flights to destinations such as London, Paris and Amsterdam. Belfast Harbour is



the second busiest port on the island of Ireland and along with the ports at Larne and Warrenpoint provides over 160 ferry and freight sailings per week to Great Britain and Europe.

These are critical enablers of our connectedness with our growth markets and recent investments have enabled trading growth and reduced the costs associated with trade. There has been significant investment in the Eastern Corridor, connecting Belfast with rapidly growing Dublin City Region. Travel times between Belfast and Dublin City Airport have reduced to approximately 90 minutes due to investment in dual carriageway and motorway links. Major investments are also planned which will facilitate further growth whilst seeking to overcome reliance on the private car as the principal means of transport within the Belfast Region. For example, the new services on the Belfast Rapid Transit System will operate every 7-8 minutes "throughout the working day", linking East Belfast, West Belfast and Titanic Quarter via the city centre.

For the Belfast Region to grow its economy, continuing to improve inter-regional and intra-regional transport is vital. Such connectivity is key to providing access to jobs, and increasing the pool of talent from which business can hire.

The Belfast Region partners also recognise the potential of government to play its part in enabling the development of the Knowledge Economy. Despite specific challenges in some rural areas, as a result of the UK and NI governments prioritising investment in digital infrastructure, both within the Region and through connections between us and our most important trading partners, NI has very high levels of broadband coverage (uptake is of course considerably lower than this). NI was also one of the first regions to operate and experience high speed, next generation services with a 100-gigabyte per second transatlantic and terrestrial telecommunications link between NI, North America and Europe.

The Matrix Report on the digital ICT sector states that there has been considerable investment in NI's communications infrastructure, "enabling it to compete on a level playing field with other advanced economies". The BRCD partners however recognise the speed of progress in the sector and are committed to being at the forefront of next generation developments in relation to 5G and full fibre deployment. The partners also understand the potential for transformative change by aligning investment in digital infrastructure with the Region's strengths in research and innovation.

Table 6: Fixed broadband in Northern Ireland

Fixed Broadband Networks		
	NI	UK
Coverage of broadband faster than:		
2Mbps (% of premises)	94%	98%
5Mbps (% of premises)	91%	96%
10Mbps (% of premises)	86%	91%
Coverage of Next Generation Access (% of premises)	95%	90%
Superfast broadband coverage (% of premises)	77%	83%
Superfast broadband coverage rural areas (% of premises)	40%	37%
Fixed broadband take-up (% of residential premises)	69%	78%
Broadband take-up fixed and mobile (% of premises)	72%	80%
Superfast broadband take-up (% of premises)	38%	33%
Average broadband download speed	28.3Mbps	29 Mbps
Average broadband upload speed	4.5 Mbps	3.5 Mbps
Average broadband download speed urban areas	32.5 Mbps	31.3 Mbps
Average broadband download speed rural areas	18 Mbps	11.6 Mbps
Premises that could receive less than 2Mbps	5.70%	1.80%
Average monthly data usage	76.8GB	82.3GB

Source: Ofcom, Connected Nations Report 2015

Note: In more recent Ofcom report broadband take-up has increased to 79% in NI compared with 83% in the UK

For the Belfast Region, in line with its vision, BRCD partners are determined to ensure that all parts of the Region are digitally included and that our infrastructure enables the next generation of knowledge economy businesses to flourish. In addition to continuing investment in the overall communications infrastructure, connecting the Belfast Region with its markets and enabling high speed connections within the region, BRCD partners also recognise the importance of working with business to enable the capability for advanced data analytics.

In relation to tourism infrastructure, investment in signature projects, such as Titanic Belfast, have been a cornerstone of the strategy that has seen such strong growth in visitor numbers and expenditure. Although starting from a relatively low base in comparison with our nearest neighbours, government investment in tourism has been highly successful in delivering growth and new investment from the private sector, for example, in the construction of new hotels across the Region. The developing tourism strategy for NI identifies the critical importance of our natural and cultural heritage, such as our areas of outstanding national beauty, to continuing growth in the value of tourism. Tourism NI has identified that the visitor offer “needs to get stronger, be presented in a more coherent and connected manner and be more accessible to compete in a competitive international landscape”. **Investment in new world class tourism products in the Belfast Region, and indeed in our digital capability, have the potential to play a key role in enhancing the visibility of the Belfast Region’s assets to international visitors.**

7. Competitive Advantage: Collaboration for Inclusive Growth

The BRCD partners recognise that delivering a sustainable change in the economic fortunes of the Belfast Region will require a long-term commitment to an integrated programme of investment that takes account of our competitive strengths and seeks to position the Region to take advantage of growth sectors and industries. It also requires a renewed commitment to a more collaborative approach throughout the Region, across all levels of government and with the support of anchor institutions and the business sector, to ensure that economic growth genuinely delivers for all parts of the community.

The BRCD partners consider that the relatively small geographic size of the Region, located as it is on the key Belfast-Dublin economic corridor and with strong infrastructure and digital connections to its markets, enables the type of collaborative, responsive and integrated approach that is necessary to tackle fundamental structural problems in our economy: low productivity, insufficient investment in R&D, high levels of economic inactivity, and skill levels which do not yet reflect the requirements of a Region that aims to be globally competitive.

The BRCD will not, of course, in itself deliver all the policies, programmes and interventions necessary to deliver the ambitions of the Belfast Region. However, the BRCD partners consider that an integrated programme of investment in the pillars detailed below has the potential to demonstrate a genuine return on investment in terms of **delivering more and better jobs and growth that is inclusive** and associated growth in net government revenues. The BRCD partners firmly believe that achieving measurable, inclusive growth within the Belfast Region can also act as catalyst for improvements in the wider NI economy and are ready to work our local and central government partners to support potential City Deals elsewhere in Northern Ireland.

The BRCD partners have identified the following priorities for investment:

Innovation- establishing globally recognised centres of research and innovation that are capable of unlocking the potential of our growth sectors.

Digital- creating an ecosystem that enables the Belfast Region to take advantage of rapid growth in the Knowledge Economy and uses digital as an enabler for inclusive growth.

Employability and Skills- delivering an integrated employability and skills programme that delivers skills for growth and skills for inclusion and which is responsive to the requirements of the economy, connects people to opportunities and anticipates and responds to the skills of the future.

Infrastructure- shaping places to deliver sustainable, inclusive growth, facilitating the rapid development of industries of the future and connecting people to opportunities.

Tourism- delivering of an authentic **tourism product** of sufficient scale and quality that delivers visibility in key international markets.