



# Maintaining Momentum

Growth for the North

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April 2018

**Balfour Beatty**



## Foreword



While establishing the Northern Powerhouse and addressing historic underinvestment in its infrastructure was always set to be a long-term process, progress has been hampered by the economic climate and other priorities including Brexit. Yet it is precisely these issues which make the Northern Powerhouse more relevant and necessary than ever. Brexit in particular gives us a golden opportunity to step forward and make decisions now that will help us improve the lives of people across the country, by investing in and empowering the North and to ensure that it becomes a global economic force to match London.

It is in the interest of the whole country that the Northern Powerhouse, as vibrant as it already is, is able to flourish. However, as it stands, the UK is the most unequally-developed country in Europe. While London has the highest employment growth of the UK regions, teamed with the most developed infrastructure, other parts of the country lag behind, outpaced by regions in countries across the EU both in terms of growth and productivity. In particular, in spite of the North's strengths in key areas such as advanced manufacturing, digital, low-carbon energy and financial services, it has neither the productivity nor the growth to reflect this. Indeed, incomes in the North have only now reached the same level they were in the southeast two decades ago<sup>1</sup>. Two of the key reasons for this are a lack of connectivity and a shortfall in skills.

Improved connectivity is rightly at the heart of plans for the Northern Powerhouse: a strong transport network is the backbone of a thriving economy. But we must have the investment to deliver the vision. The transport spend gap between London and other regions must be closed to help fire up the North's economy. Not at the expense of London and important schemes such as Crossrail 2, but in addition to them: we must invest in our infrastructure the way Germany and France do, countries we will in the future be in even greater competition with than we are now.

And our regions must be increasingly empowered to set their own strategic directions and to deliver and fund their own infrastructure priorities.

Balfour Beatty is committed to supporting the vision for a thriving Northern Powerhouse. We are proud to give our assistance to making it a reality.

**Leo Quinn**  
Group Chief Executive

<sup>1</sup> Annual Living Standards, Poverty and Inequality Report, Institute for Fiscal Studies, 2017

## About Balfour Beatty



The UK's largest construction contractor, Balfour Beatty, was founded in 1909 and is listed on the London Stock Exchange. With 15,000 employees and over 40 offices in the UK, Balfour Beatty finances, develops, builds and maintains the increasingly complex infrastructure that underpins the UK's daily life. With a legacy of projects across transportation, power and utility systems, social and commercial buildings: from Crossrail and Heathrow T2b to the M25 and M4/M5; and Sellafield; to the Olympics Aquatic Centre, we are proud to be a British company delivering iconic structures, bold engineering feats, behind-the-scenes innovation and joined-up thinking, financing and partnerships.

Balfour Beatty has a long and proud history of working in the North. Our regional construction and civil engineering business operates from offices in Manchester and Leeds, while our national utilities business is based in Sheffield. We have recently completed the Gateshead District Energy Centre providing power and heat for the area, the Tadcaster Bridge reconstruction which reunited the village following the storms in December 2015 and a nuclear waste processing plant at Sellafield. We are working on the University of Manchester's Engineering Campus Development (MECD), which will create a world-leading teaching, learning and research campus to develop the engineers and innovators of tomorrow.

As a key provider of both road and rail infrastructure, Balfour Beatty also delivers construction in the university, residential and commercial development sectors, and invests in developing skills and maximizing local social economic benefit from our activities.

## Executive summary

The UK's global competitiveness rests on our capacity to rebalance the economy. It is well-documented that infrastructure is a key driver of productivity and economic growth. It is also widely accepted that improvements to the UK's regional infrastructure are needed across the piece, especially in rail and roads, to better connect towns and cities, enable people to access employment and get goods to market. Balfour Beatty's view is that improved connectivity will become even more important post-Brexit. Brexit therefore offers an excellent opportunity to take strategic action now to strengthen the economy by investing in better transport links across the country.

There has been much discussion in recent months around regional disparities in infrastructure spend. For example, London and the southeast benefit from a significantly larger amount of transport investment, per head, than other regions<sup>2</sup>. While there has been investment in a number of flagship infrastructure schemes in the North, from the Great North Rail Project to the transformation of the M62 into a 'smart' motorway, and while there are a number of good reasons why these spending differences exist, the post-Brexit UK needs a more balanced approach to infrastructure spending in order to achieve a balanced national economy.

Of course, it is not just about spreading future investment more fairly throughout the UK, but about improving infrastructure where it will make the biggest difference. In terms of transport for example, in the past, this has meant improving links between the various regions and London, rather than better connectivity within regions, by investing in key East-West transport links such as Northern Powerhouse Rail for example. However it is improving links such as these that will bring the biggest boost to regional economies across the country, especially the North, where 92% of people who work in the Northern Powerhouse also live within it<sup>3</sup>.

There are significant economic gains to be realised if we plug the gap in transport investment. As the Northern Powerhouse Independent Economic Review highlighted, a proper investment plan for the north, including major transport investment, would create an additional 850,000 jobs and add £97 billion to the economy by 2050.

The creation of new sub-national transport bodies such as Transport for the North, is a milestone in the journey towards the delivery of more strategic transport decisions and investment which will bring the greatest economic benefit. Their creation will enable regions to speak with a single, coherent, informed voice, better articulating their priorities to key organisations including Network Rail and Highways England.

As firm supporters of the growth agenda, Balfour Beatty is keen to assist the sub-national transport bodies and combined authorities in realising their investment and growth ambitions. As the devolved nations and London have shown, this approach can transform infrastructure strategy and delivery, which is why Balfour Beatty believes that steps to ensure that similar bodies exist across the country, and to equip them with the powers they need, should be accelerated.

There are significant economic gains to be realised if we plug gaps in our infrastructure investment.

Crucially, the choice should not be between improving infrastructure and connectivity in London and the southeast, or in the North. The underlying problem is that Britain spends well below the international OECD average on infrastructure. We must be delivering better infrastructure across the whole country. Indeed, the original logic of rebalancing the economy was as much about taking pressure off London and the southeast by investing in regenerating other regions as it was about strengthening and empowering those regions because it is the right thing to do. Where public funding is insufficient, new options must be explored to ensure that this can happen. The North needs both the money and the powers to take decisions for itself regarding its infrastructure priorities.

The plans and vision behind the Northern Powerhouse are ambitious. They will take time to fully deliver and will require long-term commitment from successive Governments and from the private sector to ensure they are delivered.

<sup>2</sup> House of Commons, Transport Spending by Region, November 2017

<sup>3</sup> <http://www.centreforcities.org/wp-content/uploads/2015/06/15-06-01-Northern-Powerhouse-Factsheet.pdf>

## Key points and recommendations

1. Post-Brexit, the UK needs a more balanced approach to infrastructure spending in order to achieve a balanced national economy.
2. The Government should press ahead and ensure that all areas of England have a sub-national transport body to deliver on strategic regional infrastructure.
3. We must increase investment in rail and road networks in the North – not at the expense of London and the southeast, but in addition to it.
4. The existing processes for allocating funding must be reexamined. These tools are out of date and should be expanded to include an economic development priority.
5. For regional infrastructure disparities to be levelled, sub-national bodies such as Transport for the North must be able to finance infrastructure projects and drive forward private investment.
6. The costs of the infrastructure needed to ensure the UK has world-class regional connectivity will be so significant that we will not be able to rely on the taxpayer alone to fund and drive northern infrastructure projects. We must look at other funding sources.
7. Alternative funding not previously used outside London should be considered and made applicable for other regions, including tax increment financing (TIF), rates supplements, new forms of PPP/PFI, and land value enhancement.
8. We welcome the fact that the Government has committed to giving sub-national transport bodies such as Transport for the North a key role in the management of the road network in their regions as it develops: devolved decision making is crucial in creating local road networks that work deliver the priorities of the regions.
9. Closing the skills gap across a variety of sectors and skill levels is vital to the sustainability of the Northern Powerhouse.
10. The significant infrastructure investment being made in HS2 and other infrastructure schemes must leave a legacy beyond bricks, mortar and tracks.
11. Stronger regional infrastructure pipelines are needed to support the development of the regional talent pool.



## Maximising the impact of HS2

HS2 will dramatically increase Britain's rail capacity and shape the future of rail travel. It will be one of the most exciting infrastructure projects for decades. Balfour Beatty welcome's the Government's intention that the benefits of HS2 must be spread as widely as possible across the country.

With high-speed rail stations in Manchester, Leeds, Crewe and Sheffield, and high-speed trains serving many other destinations, the North will be the main beneficiary of HS2. It will open in 2026 and up to 18 trains will be running each hour by 2033, carrying up to 1,100 passengers each and releasing significant new capacity on the existing railways. HS2 will have a transformative impact, with the potential to unlock huge economic benefits for the North.

However, not everywhere will have an HS2 station – it will be important to ensure that there is infrastructure investment outside these core areas as well, and in particular, beyond the core Hull-Manchester-Leeds-Liverpool corridor, so all areas of the North benefit from better connectivity. We therefore believe that the benefits of HS2 for the region will only be fully realised if they come alongside other transport improvements, in particular, better connectivity within the region as well as between the North and other parts of the country, as articulated in the Northern Powerhouse Independent Economic Review<sup>4</sup>.

Newcastle and Durham for example, will become what the Government is calling 'integrated high-speed stations', where passengers can catch HS2 trains and travel for much of their journey on a high-speed line. To ensure it is maximizing the benefits of this, Newcastle is investing £9 million in the transformation of Central Station and a further £8 million in the redevelopment of the Central Metro station. This kind of investment should be replicated across the North.

Balfour Beatty has considerable experience of designing and building railway stations. Modernization of and development around stations is an excellent way of attracting investment into towns and cities. Well-designed stations do not just facilitate connectivity – they also have the power to genuinely transform local economies: catalysing economic growth by attracting new residents, businesses and investment into the area. Building a new station or redeveloping an existing station can support the regeneration of a whole town or city, revitalising the centre. Stations can be architecturally inspiring, in some cases, iconic. They offer significant development opportunities and can act as commercial and leisure hubs. The area around stations offers a great opportunity for high-density residential development as well as new office, leisure and retail space, usually right in the town or city centre.

Balfour Beatty is proud to have been awarded two contracts by HS2, worth a combined total of c. £2.5 billion. Balfour Beatty VINCI (Balfour Beatty's 50:50 joint venture with VINCI) will deliver Lot N1, valued at c. £1.32 billion, and Lot N2, valued at c. £1.15 billion, between the Long Itchington Wood Green tunnel to the Delta Junction / Birmingham Spur and from the Delta Junction to the West Coast Main Line tie-in near Lichfield in Staffordshire respectively, in a two-part design and build contract.

The contract awards reflect the innovative and collaborative nature of the joint venture. Balfour Beatty's in-depth knowledge and expertise of British transport will be applied and complemented with the capabilities of VINCI's High Speed Tours-Bordeaux project in France. Collaborating in this way, the joint venture will deliver one of Britain's largest infrastructure projects in decades, creating thousands of jobs and supporting the economic growth of the North and the whole country.

Main construction work is scheduled to start in 2018/19, following a period of detailed design work.

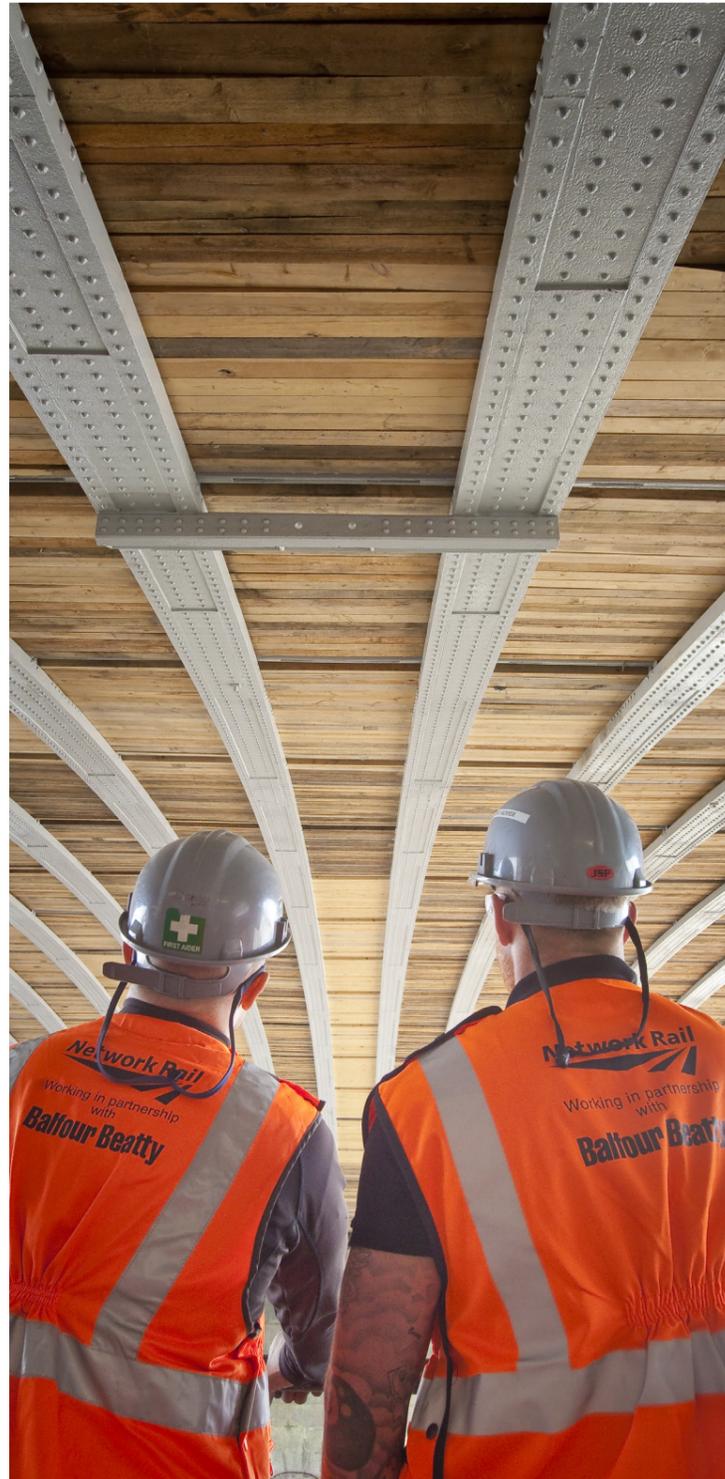
<sup>4</sup> Transport for the North, Northern Powerhouse Independent Economic Review, June 2016

The £25 million redevelopment of Sheffield Midland rail station completed in 2008, for example, resulted in the creation of 3,000 jobs nearby<sup>5</sup>, while 57,000 new houses are being built within a kilometre of the new Crossrail stations<sup>6</sup>. For this reason, stations are now, quite rightly at the heart of local and combined authority growth plans. Stations across the country are at the heart of “masterplans” to revitalise communities from Euston to Edinburgh. With London St Pancras, Birmingham New Street, Manchester Victoria and Bristol Templemeads amongst the most famous examples, all of the areas due to see new Crossrail or HS2 stations also have their own plans to use these transport nodes as the catalyst for residential, commercial and leisure related developments.

New stations must be designed with the long-term needs of the region in mind. For example, we must ensure that, when the new Manchester Piccadilly HS2 station is being designed, sufficient capacity is built in to also accommodate Northern Powerhouse Rail services. To this end, Balfour Beatty welcomes the £300 million the Government has already announced to enable Transport for the North to plan for work on the railways to make sure HS2 services work alongside other services.

Station schemes Balfour Beatty has been involved in recently include the complex redevelopment of Kings Cross, a key London Terminus. Balfour Beatty constructed the Northern Ticket Hall adjacent to King’s Cross main railway station to improve access to the Northern, Piccadilly and Victoria lines via banks of new escalators and lifts.

Balfour Beatty also led the £350m redevelopment of Blackfriars Station. London’s only station to span the Thames, it also provides entrances on both sides of the river. The scope of this project included increasing platform length to accommodate longer trains, refurbishment of the Underground station and the creation of a new station on the South Bank for the first time in 120 years. The complex refurbishment of the existing structure, the extensive temporary works, the building, structural, civil engineering mechanical and electrical expertise were all delivered through our own resources. A new roof was fitted with around 4,400 solar panels that provide up to half the energy for the station and enable the station’s carbon emissions to be reduced by around 511 tonnes a year. The station now has a unique, sustainable identity as the world’s largest solar-powered bridge.



## Roads, rail and air: better connectivity for the North

Developing interconnectivity, not just between the key cities of the North, but across the whole region, moving people seamlessly around, helping them get to employment, is vital to the creation of a strong Northern Powerhouse.

The North of England is home to 15 million people – a population almost twice that of London. It generates around 20% of the UK’s gross domestic product, accounts for 19% of UK exports and contains five of the UK’s ten largest cities<sup>7</sup>. Despite this huge economic potential, inequality between the UK regions’ economies is amongst the largest of any country in Europe<sup>8</sup>, and the productivity gap between north and south is widening. The Government’s Northern Powerhouse Strategy<sup>9</sup> concludes that a: “lack of connectivity is holding back growth and productivity” in the region.

Of course, there are great cities and towns across the North, together with impressive universities and individual examples of outstanding business and manufacturing strength, including Nissan’s Sunderland car plant and the global centre of nuclear excellence in Cumbria. Building on these strengths by better connecting these areas will be vital. Indeed, the Northern Powerhouse Independent Economic Review<sup>10</sup> highlighted that a proper investment plan for the North, including major transport investment, would create an additional 850,000 jobs and add £97 billion to the economy by 2050. Moving people seamlessly around the North, helping them get to employment, developing interconnectivity not just between the core cities of Manchester, Leeds, and Sheffield, but across the whole of the North, from Newcastle, Sunderland, Carlisle, Bradford and Hull, and including the northern towns too, is vital to this goal. For these reasons, the National Infrastructure Commission in June 2017 identified the need for a single integrated plan for the first phase of High Speed 3, incorporating proposals for electrifying and upgrading the trans-Pennine (Manchester to Leeds) rail route, plans for the northern sections of HS2, and plans for the redevelopment of Manchester Piccadilly station as one of the top 12 immediate infrastructure priorities<sup>11</sup> on which ministers need to make rapid progress in the next year. Balfour Beatty supports this list of priorities and urges the Government to bring forward these schemes as soon as possible.

We also welcome and support Transport for the North’s recently announced draft Strategic Transport Plan (STP) which outlines the priority infrastructure needed to transform the region’s economy and calls for sustained prioritised investment in the region’s railways and roads over a 30-year period. To build new transport infrastructure and upgrade that which already exists, of course requires significant investment.

An effective road network is vital to the continued growth of the UK economy. Roads are the country’s arteries, ensuring that people can get to their jobs rather than sitting in congestion, supporting the transfer of goods to markets and linking local economies across the country. Balfour Beatty is supportive of the ‘Major Road Network’<sup>12</sup>, which would add to Highways England’s Strategic Road Network a further 3,800 miles of local authority-controlled ‘A’ roads of key economic importance which are vital to supporting England’s regional economies. We welcome the fact that the Government has committed to giving sub-national transport bodies such as Transport for the North a key role in the management of the network in their regions as it develops: devolved decision making is crucial in creating local road networks that work deliver the priorities of the regions.

Balfour Beatty is a recognised leader in modern rail engineering. With a successful track record of implementing the latest digital technologies to improve efficiency across the rail infrastructure asset lifecycle, we have planned, designed and managed the construction of thousands of miles of railway systems. From feasibility studies and planning, design and implementation to maintenance and asset management, we provide rail infrastructure services across the lifecycle of rail assets. Our expertise covers track, power, electrification, civils, signalling and railway systems and technologies.

<sup>5</sup> Transport Works  
<sup>6</sup> Crossrail 2017

<sup>7</sup> The Northern Powerhouse: One Agenda, One Economy, One North, HMG, March 2015  
<sup>8</sup> <http://www.bbc.co.uk/news/business-38186047>

<sup>9</sup> HMG, Northern Powerhouse Strategy, November 2016

<sup>10</sup> Transport for the North, Northern Powerhouse Independent Economic Review, June 2016

<sup>11</sup> National Infrastructure Commission, June 2017

<sup>12</sup> Rees Jeffreys Road Fund Study, David Quarmby and Phil Carey, October 2016

The second Road Investment Strategy (RIS2) will be delivered between 2020 and 2025. The Government has rightly committed to working with sub-national transport bodies such as Transport for the North to develop a long-term vision for transport in their area and inform decisions on the RIS<sup>13</sup>. The Government is spending c.£3 billion to make journeys faster and more reliable on the North's roads and motorways. The M62 between Leeds and Manchester is being upgraded to a four-lane smart highway. The last remaining section of non-motorway on the M1/A1 route between London and Newcastle has been removed. The new Mersey Gateway crossing has recently opened and work is underway on the A6 Manchester Airport relief road, while Balfour Beatty has upgraded a 17 mile stretch of the M60 and M62 to a 'smart motorway', increasing capacity, reducing congestion and shortening journey times for motorists. However, there is much still to do. The A63 improvement in Hull has since been delayed to at least 2020.

Nor is it just road and rail which are important: the region's ports and airports will also have a vital role to play in securing international trade and investment in the North of England. Key schemes such as the Liverpool 2 port expansion scheme, which will double this key global gateway's container capacity, are vital to ensure foreign investment as are other developments. For example, since the new service from Manchester airport to Beijing opened in 2016, the amount of spending by Chinese tourists in the North of England has doubled, while exports from the North to China have increased by a quarter<sup>14</sup>. This is particularly important given how important foreign investments is to building the Northern Powerhouse, and demonstrates how investment in the region's ports airports can have a significant impact on economic growth.

Balfour Beatty welcomes investment in the North's airports such as the £1 billion being spent on improving and enlarging Manchester airport. It will be important to ensure that, if the Scottish Government abolishes Air Departure Tax in Scotland, (known as Air Passenger Duty in England) as has been suggested may happen, airports in the North are not adversely impacted and remain able to compete with these relatively nearby airports.

Investment in the North's ports and airports will result in benefits beyond the North: for example, improving connectivity around the North's ports on Teesside, Merseyside, Tyneside and the Humber will not only help the North but will decongest key arteries such as the A14.

Balfour Beatty maintains, manages and operates major highway networks across the UK. From routine maintenance and winter maintenance, to managing the day to day operation of motorways and dual carriageways, we also manage large sections of the trunk road network and constantly seek to find ways of reducing delays and improving journey time reliability for road users.

Working for local authorities, we also provide highways maintenance, street lighting and public realm services.

Our expert approach to highways maintenance means we do more than fix the potholes and make sure the street lights are on when they should be, we improve everyday lives by minimising disruption and help our customers to manage their budgets through forward planning. Our solutions include consultancy, finance, design and maintenance of the entire streetscape. We're shaping places, creating economic growth and meeting the needs of a changing society.



Balfour Beatty has significant experience in airport infrastructure development in the UK, US and Hong Kong. Our experience covers all aspects of airport and airfield work, including major passenger terminals and passenger transit facilities, airport facilities, and a full range of service installations.

We have long-established relationships with airports including Heathrow, Gatwick, Glasgow, Edinburgh, Aberdeen, Dublin and Hong Kong Midfield. These relationships are founded on our ability to deliver high quality infrastructure and successfully managing the security, logistics and health and safety requirements associated with working in an airport environment. At every stage of project development, we use advanced computer graphic applications and the latest modelling systems to help airports – large and small – envision and shape their future.

Balfour Beatty combined its design, construction, ground engineering, specialist mechanical and electrical expertise in the second phase of Heathrow Airport's Terminal 2 (T2B) for BAA. A £2bn investment by BAA replaced the old 1950's terminal 2 and is now the home of the "Star Alliance" Airlines. T2B was built in a Live Airport environment. Combining retail space, airline lounges, offices, a safeguarded baggage basement for future expansion, underground passenger access tunnel and safeguarded Track Transit System station and baggage tunnels for future expansion, it was the largest ever airside project at Heathrow. Due to the scale of the scheme and the fact that the airport remained operational throughout, the project required significant innovation, the use of new construction techniques and the use of Building Information Modelling (BIM) and Design for Manufacture and Assembly (DFMA).

<sup>13</sup> Road Investment Strategy post 2020: planning ahead, DfT, 2016

<sup>14</sup> House of Commons debate on Transport in the North, 6 November 2017

## Investing in infrastructure

To build new infrastructure and upgrade that which already exists, of course requires significant investment. Balfour Beatty welcomes Government plans to invest £13 billion in northern transport before 2020, including £556 million for infrastructure projects as part of the industrial strategy announced by Prime Minister Theresa May in January 2017. Nonetheless, there remain regional disparities in infrastructure funding between the North and the Southeast and London.

The Institute for Public Policy Research<sup>15</sup> analysis concludes that planned spending on transport infrastructure is £1,940 per head for in London from 2016/17 onwards, compared, for example, to £190 per head in Yorkshire and the Humber and £680 per head in the North West.

There are a range of reasons for some of the disparity in investment, including the significant number of non-London residents from commuters to tourists, who use London's transport network daily, placing it under significant pressure. Nor do the figures take into account schemes such as HS2, which will bring greater benefit to the North and Midlands than to the Southeast<sup>16</sup>. Even accounting for these points, though, there remains too much of a difference between the amount invested in the North and the South. Balfour Beatty's view is not that less should be invested in London in order to even this out, but that more should be invested in northern infrastructure projects.

In spite of significant investment by the Government, Britain still invests less in its transport infrastructure than other major economies, spending less than countries including Germany, France and the US<sup>17</sup>, and has done compared to other OECD countries over the past three decades<sup>18</sup>. Given this underinvestment, there is an element of catch-up, especially in relation to the country's regional transport infrastructure. In the light of the UK's imminent exit from the EU and the challenge of competing with countries such as France and Germany on a less certain footing, it is more important than ever that we boost our infrastructure spending across the country.

Firstly, however, the existing processes for allocating funding must, in our view, be reexamined. The Benefit Cost Ratio (BCR) processes can be over-reliant on narrow financial criteria relating to high population densities and high wages, rather than considering wider social and economic benefits such as potential new jobs and the Gross Value Added (GVA) of new infrastructure. We believe that these tools are out of date and should be expanded to include an economic development priority: we need all parts of the country to be growing.

Another key way to help tackle regional funding differences is by addressing fragmented regional decision making across the country. Balfour Beatty believes that the devolution agenda has real potential to improve infrastructure outside the capital, especially where sub-national bodies, such as Transport for the North and Midlands Connect are able to take a strategic view and coordinating role. While a 'one-size-fits-all' approach to sub-national governance would not be appropriate, giving regions the power to decide for themselves what their infrastructure priorities are has to be the best way forward and we welcome steps that have already been taken to this end.

Transport for the North is already having a significant impact and is making its voice heard on the North's priorities. However, we believe that formal legal status would enable it to do more. We recognize that the process of establishing Transport for the North is complex and involves 56 authorities. It will be the first statutory sub-national transport body to be established. However, as currently planned, Transport for the North will not have nearly the same powers as Transport for London. It will be a "statutory influencer" with the right to prepare a strategy and provide the Secretary of State with advice. Transport for the North will not be able to borrow money or fund investment like Transport for London. For regional infrastructure disparities to be levelled, these bodies must be able to finance infrastructure projects and secure private investment.

Balfour Beatty welcomes the Chancellor's October 2017 announcement of £300m, which will go towards ensuring HS2 infrastructure can accommodate future Northern Powerhouse Rail and Midlands Connect services. However, we believe we must also look at other funding sources. The costs of the infrastructure needed to ensure the UK has world-class regional connectivity will be so significant that we will not be able to rely on the taxpayer alone to fund and drive northern infrastructure projects. For example, in July 2017 a range of rail electrification projects, including Oxenholme to Windermere, and the whole line north of Kettering to Sheffield and Nottingham were cancelled. Plans to electrify the Hull to Selby line had already been postponed in November 2016, despite Transport for the North describing the scheme as: "intrinsic to the story of transformation and to provide necessary conditions to support the radical step-change required to deliver the Northern Powerhouse and strategic transport improvements to underpin this."

There must be reliable, robust funding to ensure that plans such as these can be delivered. Alternative funding not previously used outside London, should be considered and made applicable for the North, including tax increment financing (TIF), rates supplements, new forms of PPP/PFI, and land value enhancement.

The North must be able to finance infrastructure projects and drive forward private investment.

Balfour Beatty is a leader in the delivery of Public Private Partnerships (PPPs), and has been successfully tendering and operating privately financed public infrastructure projects since they were first used in the UK over 20 years ago. Our experience has seen us develop a range of innovative ways to finance, deliver and maintain roads, hospitals, schools, student accommodation, street lighting, waste management facilities and offshore electricity transmission projects. With a strong track-record of financing public infrastructure in the UK and abroad, having closed projects with over £10 billion of private capital including our own investments, we have extensive experience of structuring transactions from a variety of sources including banks, monoline insurance companies and institutional investors. Our projects provide competitive financing terms that deliver value for money to our clients. We work hard to ensure that our proposed solutions continue to be deliverable and remain competitive throughout all stages of the project life cycle.



<sup>15</sup> IPPR North, February 2017

<sup>16</sup> High Speed 2 Ltd HS2 Regional Economic Impacts, KPMG, September 2013

<sup>17</sup> Transport for the North, Northern Powerhouse Independent Economic Review, June 2016

<sup>18</sup> Improving infrastructure in the United Kingdom, Economics Department Working Papers No. 1244, OECD, 2015

## Residential and commercial development



Balfour Beatty has extensive experience in delivering high-end residential and schemes and is a leading constructor in delivering high quality commercial buildings. We are currently working on a £150 million contract to deliver the main construction works of The Madison Tower in Canary Wharf, London, which is scheduled for completion in 2020. This will see Balfour Beatty deliver the iconic 53-storey landmark tower to include 423 residential apartments, residents' lounge and business facilities.

Balfour Beatty is undertaking its first venture into build for rent in Manchester with New Cross Apartments, a residential-led mixed-use development within New Cross, Manchester, which will provide 274 new homes.

Key to continued growth across the North is of course ensuring that businesses are able to locate there and have the space to grow; and that the workforce of the future has the attractive, well-designed housing it needs. This must happen across the North, beyond well-established investment hotspots such as Manchester, Leeds and Liverpool. Even in Manchester, there has been a significant under supply of new housing, with under half of the annual target of 10,000 new units a year being delivered. With predictions of population growth in the region seeing 209,000 new households locating in the region by 2022<sup>19</sup>, this issue is one which needs prioritizing.

Similarly, as the growth in the Northern Powerhouse continues, the overall supply of rental properties for business use is falling and rents are increasing<sup>20</sup>. With demand predicted to remain high across the region, development of commercial properties for businesses of all sizes must continue to ensure the need is met. The scale of development will bring new players to the market, for example, Hong Kong-based developer Far East Consortium (FEC), which is behind the Northern Gateway, an investment partnership between FEC and Manchester City Council to provide 10,000 homes across the northern side of central Manchester over the next decade. The significant amount of development will also drive the need for digital and modular construction to reduce resource demand and improve productivity.

<sup>19</sup> Residential Forecasts Northern England, UK Research, JLL, February 2017

<sup>20</sup> Northern Powerhouse Office Market Report 2017, Lambert Smith Hampton, November 2017

## Leaving a legacy: skills and employment

Delivering the North's infrastructure priorities relies on having the skilled workforce trained at ready in the right place, and the right time. It also means that more must be done, more strategically, to remove educational barriers which remain in the UK's former industrial heartlands.

In the short-term, skills shortages in the construction industry are an ongoing issue which must be addressed. With demand for workers outstripping supply, wages are driven up, impacting the ability to deliver schemes to budget and putting margins under strain. In some cases, a shortage of skilled labour puts at risk the deliverability of schemes. Of course, Government has a key a role to play here in ensuring the education system delivers the pipeline of skills industry needs. For this reason, we believe stronger regional infrastructure pipelines are needed to support the development of the regional talent pool.

The establishment of the Northern Powerhouse and a number of Combined authorities across the North create the environment where it is possible to take a more coordinated approach. This longer term, strategic approach to investment programmes, combined with a greater focus on ensuring funding certainty and local value added will help transform procurement and commissioning behaviours and derisk delivery, while ensuring that companies such as Balfour Beatty are making opportunities visible to the local supply chain, and working collaboratively across the region to enable them to take advantage of them. These measures will be a significant step towards ensuring the availability of the skilled workforce needed.

As a British company with a hundred year legacy in the UK, Balfour Beatty is committed to addressing the skills shortages in the UK and investing in home grown talent. Balfour Beatty employs over 150 apprentices each year in the UK in addition to the 320 currently under training in a diverse range of roles across the business. We employ around 700 more young people on graduate and part-time higher education/degree schemes. Balfour Beatty is also a long standing member of The 5% Club, an employer led organization set up by our Group Chief Executive, Leo Quinn, four years ago, aiming to address the skills gap by getting more young people into earn to learn opportunities, encourage businesses to take the lead on training and promote apprenticeships as a positive career decision.

<sup>21</sup> Federation of Master Builders (FMB)

Two-thirds of all apprentices in construction receive their training via the Small and Medium Enterprises (SME)<sup>21</sup>, which dominate the sector. Smaller businesses have a prominent role in the UK construction market and a significant role to play in the continued health of the sector and the wider economy – they will be key to the success of the Northern Powerhouse – which is why Balfour Beatty takes a proactive approach to supporting the SMEs in its supply chain. For small businesses in particular, investment in infrastructure such as high speed broadband will be key to ensuring sustainable growth.

Balfour Beatty encourages supplier diversity and currently has a supply chain that consists of a large proportion of SME and minority-owned businesses. We spent £1.4 billion with SMEs and £118 million with women-owned businesses last year. In 2016, Balfour Beatty was awarded the 'Inclusive Procurement Award' at the Minority Supplier Development UK (MSDUK) awards. The award recognises Balfour Beatty's inclusive approach towards its supply chain and its engagement with minority owned and small businesses.

Balfour Beatty believes that supporting apprenticeships as a path into industry has never been more important. We have welcomed and supported both the Apprenticeship Levy and the target to create three million new apprenticeships by 2020, as long as they are underpinned by a focus on completions and quality. The skills shortage across the construction industry is such that all the Apprenticeship Levy being paid by construction companies must be reinvested in high quality construction apprenticeships. To this end, Balfour Beatty is encouraging companies in our supply chain to consider setting up apprenticeship schemes to train the next generation and future-proof their businesses and the sector as a whole. The construction industry skills gap will only be bridged if more employers take on apprentices. We are also working with the Government to refine the Apprenticeship Levy, in order to ensure it delivers the maximum number of apprenticeships.

## The digital future

Over the longer-term, while physical infrastructure and the increased connectivity and capability they facilitate are vital, we must ensure that the significant infrastructure investment being made in HS2 and other schemes leaves a legacy beyond bricks, mortar and tracks. We must use the significant infrastructure investment being made over the coming decade to build skills and capability, and provide jobs for a generation. Closing the skills gap across a variety of sectors and skill levels is vital to the sustainability of the Northern Powerhouse. For the North, providing future generations with the skills needed to build future infrastructure projects will be key.

Business has a key role to play in maximizing local employment and skills during and after delivery of the investment, from taking on apprentices locally and ensuring that local businesses are used wherever possible to build and showcase capacity, to building strong relationships with local schools and with the universities and further education colleges based across the region, to ensure the development of training and skills that match local employers' needs.

Crucially, we must have an environment underpinning the Northern Powerhouse in which local people are educated and trained in skills that match needs.

Productivity in the construction industry has been almost flat over the past two decades<sup>22</sup>. This is due to a number of factors, from the cyclical and fragmented nature of the industry, to low profit margins resulting in a lack of investment in new machinery and equipment. And yet infrastructure construction and housebuilding are at the heart of the country's plans to boost economic growth across the country, so the productivity of the sector is of key importance to the UK economy.

There are two key ways to improve productivity: investing in better machinery and equipment; or improving process, which allows a worker to increase the speed or quality of what they are doing. In the construction industry, this largely means embracing improvements in technology and new methods in construction, techniques which have driven productivity improvements in other sectors. Technologies that offer particular promise to increasing productivity include off-site fabrication, robotics, mobile technologies, BIM, and augmented reality. Of specific benefit in the construction industry is the ability to share data in real time across the supply chain, allowing for a more collaborative, streamlined approach to projects, reducing costs and boosting productivity. This is because digital technologies offer the ability to provide early insight of job and production status, enabling the most effective deployment of labour and materials. For example, if real time updates are available and all those involved know that a crane is unavailable, products which cannot be unloaded to the site are not shipped, saving time for both the supplier and the onsite team in resolving the issue.

Balfour Beatty has made significant progress in its vision to become a truly digitally empowered business. Development of internal expert capabilities such as the training of new Drone Pilots, a digital surveying team with full laser scanning service, a high-end visualisation team and a significant increase in BIM-related skills has shown an increase in quality, a leaner approach and a safer working environment. In 2016, we undertook global collaboration in the fields of Virtual Reality and construction robotics, using skills from the UK, USA and Hong Kong. Both technologies are vital to the future of Balfour Beatty and the industry as a whole. We set out some of our thoughts on the digital future of the construction and infrastructure industry in our recent thought piece: *Innovation 2050 – A Digital Future for the Infrastructure Industry*<sup>23</sup>.

Although becoming digital-ready and responding to the fast-changing technological landscape is a challenge in the short term, embracing innovation and new technologies also offers the sector the best way of tackling the skills shortfall. Increased automation, off-site prefabrication and modularization will reduce the number of people required both on and offsite, driving safety, efficiency and productivity improvements. This is why Balfour Beatty has set itself the target of ensuring that 25% of our onsite activities today are done offsite by 2025. As an industry, we must find better ways of ensuring we have the workforce we need than simply looking to recruit more people although that is of course important in the short to medium term. The industry needs a better, more strategic solution and we believe that innovation and the increasing use of offsite and new technologies provides that.



<sup>22</sup> ONS, Productivity Handbook, April 2016

<sup>23</sup> <https://www.balfourbeatty.com/innovation2050>

## Conclusion

Building the Northern Powerhouse is not just about infrastructure. But infrastructure, with its role in underpinning connectivity and growth, is the most important place to start to spread prosperity beyond the North's economic hubs to encompass the rest of the region. This growth will not only benefit the North, but will also be good for the whole of the UK.

Brexit offers a golden opportunity to take strategic action now to future-proof our regional economies for the long-term. The key thing now is to maintain the momentum: we must now work together to make this vision a reality.





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