



SECTOR: CONSTRUCTION

D2N2 SECTOR DEVELOPMENT ACTION PLAN

October 2014



Derby
Derbyshire
Nottingham
Nottinghamshire

THE UK'S MOST
INSPIRATIONAL
POSTCODE

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EXECUTIVE SUMMARY

Currently generating 8% of GVA in the area and employing 1 in every 12 employees, the construction sector is already a primary wealth generator for the D2N2 economy. Given a policy focus on the need for further infrastructure development and house building, the sector also represents a significant opportunity for further development and job creation throughout the course of D2N2's Strategic Economic Plan.

One of the things that marks construction as being distinct from other areas of activity is the wide diversity of companies that comprise the sector, ranging vastly in terms of size and focus. While this diversity is a strength, supporting competition and different entrance points to the market, it also means that a range of interventions and support mechanisms are required to support the sector – a one-size-fits-all approach will not be sufficient for realising the potential of construction in D2N2.

Another distinguishing feature of the sector is that it is heavily driven from the top down, starting with the needs of public and private sector infrastructure requirements. Procurers set the criteria as to how they expect the sector to deliver these requirements; these in turn drive the activity that needs to be delivered by those operating within the sector.

Consideration also needs to be made as to the rapidly moving nature of the market and its sensitivity to broader national policy. The current trend identifies an increasing number of areas where the market is "overheating", with some larger construction companies operating at capacity and reporting skills and materials shortages. This has the potential to result in companies not being willing to enter into new tendering opportunities, which in turn provides a huge opportunity for the SME construction companies who can upskill and step up a level to put themselves in a position to tender for this work.

There are examples of strong practice of support for the construction sector from elsewhere in the country that can be explored and developed in D2N2. Construction Sector Pipeline Analysis undertaken elsewhere has given the sector added surety of future activity, supporting the development of labour force and other business investment decisions.

The production of this Action Plan has been business-led, with the proposed actions put forward by the construction sector within D2N2. Case studies are provided throughout this paper, illustrating the diversity and wealth of the sector in D2N2.

SUMMARY OF RECOMMENDATIONS

There are 18 recommendations made in the report. The table below categorises them by: Skills and People Development; Communication and linkages; and forward planning and developing new opportunities.

For each recommendation one of five proposed leads has been suggested to drive the work forwards. These are:

1. Employer-led Activity: *To be facilitated through the construction sector group brought together in developing this plan and the Chamber of Commerce's Sector Forum.*
2. D2N2 LEP Activity: *Led centrally by the LEP*
3. Skills providers: *HEI/FE/Training Providers/CITB*
4. Construction Ambassador Activity: *This is a proposed new role that would support smaller construction companies to engage with opportunities. The remit would also include facilitating links between different partners and supporting better communication across the patch*
5. Export: *Partners including UKTI, Global Chambers, Chambers International Relationship Manager*

All recommendations have been made with consideration of the following LEP areas for delivery.

a. Sector-specific skills needs and priorities

b. Tailored business support services

c. Supply chain opportunities and networking

d. Cross-LEP linkages and opportunities for international trade

e. Connecting business and academic expertise to increase levels of innovation and speed sector growth

SKILLS AND PEOPLE DEVELOPMENT	COMMUNICATION AND LINKAGES	FORWARD PLANNING & DEVELOPING NEW OPPORTUNITIES
<p>Recommendation 2 - Improve links between education and training providers to meet the future needs of the sector, ensuring that curriculum and training provision meets the demands of emerging volumes of activity around nuclear build and the green agenda are met.</p> <p>Lead: Construction Ambassador</p>	<p>Recommendation 1 - Improve access to public sector land to enable developers to fulfil increased demand for housing, scoping exercise to identify areas suitable for development and to smooth the planning process</p> <p>Lead: D2N2</p>	<p>Recommendation 3 -Develop and deliver a training package for SMEs around green construction, which includes Building Information Modelling (BIM) and supports aesthetic design principles, to support the reduction of waste and improve efficiencies.</p> <p>Lead: Skills providers</p>
<p>Recommendation 12 - Access to funding to support small and micro design professional and construction companies to begin the BIM journey</p> <p>Lead: D2N2</p>	<p>Recommendation 4 -Create, or build on current activity, to provide a sector specific construction network which will improve links between academia and business to support the development of skills and product innovations</p>	<p>Recommendation 5 - Supporting increased activity in export markets, linking in with product development and innovation, drawing on UKTI and Global Chambers Manager and DNLCC International Relationship Manager to develop a sector specific support offer.</p> <p>This should also feed into the use of BIM and the delivery of flexible and</p>

	Lead: Construction Ambassador	<p>adaptable courses to meet the requirements of our SME's and micro businesses which will ensure the sector can meet the contractual requirements set in OJEU</p> <p>Lead: Export</p>
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<p>Recommendation 13 - Development and delivery of industry relevant leadership and management programmes to support and disseminate best practice</p> <p>Lead: Skills providers</p>	<p>Recommendation 6 -Support of the initiatives set out by the HSE in their Construction Division Plan of Work 2014/2015.</p> <p>Supporting better interaction between HSE, Colleges, Training Providers and employers – to be included in sector specific network</p> <p>Lead: Construction Ambassador</p>	<p>Recommendation 7 - Commissioning of D2N2 pipeline analysis, in collaboration with East Midlands Councils to explore cross working with other Local Enterprise Partnerships</p> <p>Lead: D2N2</p>
<p>Recommendation 14 - Encourage employers to engage with current ATA models in operation within the D2N2 area</p> <p>Lead: Construction Ambassador</p>	<p>Recommendation 9- Work with public sector procurement bodies to standardise PQQs and to encourage their buy-in to adopt this process</p> <p>Lead: D2N2</p>	<p>Recommendation 8 - Commissioning of an SME subcontractor portal which details companies which hit agreed criteria for inclusion on frameworks and local authority supply chain lists. Encouraging public sector buy-in and usage of the portal. This will improve visibility to larger contractors and should include a service to upskill SMEs to become eligible for inclusion. PQQ standardisation should also form part of this process</p> <p>Lead: D2N2</p>
<p>Recommendation 15- Work with sector skills council, employers and the National Apprenticeship Service to ensure that apprenticeships remain sector relevant, valuable and viable</p> <p>Lead: Employer Led</p>	<p>Recommendation 11 -LEP to commission the development of robust Strategic Housing Market Assessments for local authorities where they don't exist (Reference Recommendation 1)</p> <p>Lead: D2N2</p>	<p>Recommendation 18- Commissioning of a prospectus of support which maps areas of activity and support to encourage innovation in the construction sector, this should include the delivery of business engagement events to promote the various areas of innovation support in the area</p> <p>Lead: D2N2</p>
<p>Recommendation 16- Funding to provide sector specific training to enable new entrants and returners to the sector to become "site-ready"</p> <p>Lead: D2N2</p>	<p>Recommendation 17 - Increase interaction between Education Institutes and employers, this element should also form part of leadership and management programmes which aim to support career progression and gives graduates a line of sight to the</p>	

	<p>vast range of career opportunities</p> <p>Lead: Construction Ambassador</p>	
	<p>Recommendation 10 - Build on the Client Based Approach model developed by CITB to improve outputs to create a more effective, competitive public sector procurement process. Bring together relevant parties to formalise a process to improve better outputs</p> <p>Lead: D2N2</p>	

1. INTRODUCTION

Construction has been identified by D2N2 as a key strategic priority area, realising the importance of building on newfound confidence as the sector emerges from recession. This Action Plan document for the construction sector in D2N2 has been produced by business and proposes a series of recommendations and activities the LEP could support to further develop a vibrant and successful construction sector in D2N2.

In its Strategic Economic Plan, D2N2 identified five areas for the plan to take into account when developing Actions:

- 1. Sector-specific skills needs and priorities**
- 2. Tailored business support services**
- 3. Supply chain opportunities and networking**
- 4. Cross-LEP linkages and opportunities for international trade**
- 5. Connecting business and academic expertise to increase levels of innovation and speed sector growth**

An initial meeting of construction sector organisations was held on 19th February 2014 to focus down discussions on the approach the sector needs D2N2 to take. Two subsequent meetings, a number of face to face meetings and surveys were undertaken to further refine identified priorities.

From these meetings the following vision and overarching message from the sector were identified.

Vision for D2N2 Construction Sector

To have a vibrant construction sector in D2N2, in which procurement opportunities are joined up and accessible, the expectations of workforce skills are consistent and clear, and the training provision to supply this is relevant and available.

Overarching message from the sector

The construction sector is driven from the top down from the needs of public and private sector infrastructure and construction requirements, planning and the demand to deliver more for less. Procurers set the criteria as to how they expect the sector to deliver these requirements; these in turn drive the activity which needs to be undertaken by those operating within the sector.

In producing recommendations for the LEP to achieve this vision, this document looks at the national picture for construction, features of the UK sector and current policy and sector drivers. It then narrows this down to look at the D2N2 construction sector and specific opportunities within the D2N2 geography, many of which have been outlined in the Strategic Economic Plan. It finishes by looking at the skills provision required to recognise the opportunities that have been identified, giving D2N2 a competitive edge over other parts of the UK. Recommendations from the sector are made throughout the document, highlighting areas that have emerged through the consultation process where business believes resource can be focused to achieve maximum output for D2N2. These are brought together and summarised at the beginning of this report.

Bowmer & Kirkland



Founded in 1923, the Group now consists of 29 subsidiary companies or divisions and has become one of the UK's most successful privately-owned construction, engineering and development groups; with headquarters in Derbyshire and regional offices in Manchester, London, Sunderland and Glasgow offering a nationwide service with a regional focus.

One of Bowmer & Kirklands most recent high profile contract awards was for the construction of the New National Football Centre following an extensive competitive single stage design and build process. The National Football Centre named as St Georges Park is built on a 330-acre freehold site in the heart of the National Forest near Burton-upon-Trent and fully owned by the FA.

The scheme itself comprised two / three storey hotels – A 142 bed 5 Star Hilton Hotel and an 86 bed 3 Star Hampton by Hilton; As well as the bedroom wings there are separate dining wings with function rooms, bars, restaurants and kitchen facilities. There is a leisure wing housing a 20m swimming pool, Jacuzzi, sauna, steam room, spa treatment rooms and changing facilities. To the ground floor of the Hampton wing there are training and conference suites for the FA's learning team as well as a 90 seat lecture theatre and a modern digitally equipped library.

The sports building has a striking witches hat atrium design and incorporates state of the art office accommodation which is now the operational base for FA specialist staff. Further to the offices, there are elite changing facilities and treatment rooms, as well as other changing facilities for general users. An altitude centre has also been created where athletes can be tested for the oxygen capacity and other respiratory scenarios. Access to the outdoor elite pitch can be gained from the mezzanine steel balcony; this pitch is a precise replica of Wembley and includes all under-soil heating and irrigation systems.

Case study: Bowmer and Kirkland

2. THE NATIONAL CONTEXT – SECTOR OVERVIEW, CURRENT POLICY AND GROWTH OPPORTUNITIES

2.1 Sector Overview

There are 309,000 construction businesses in the UK, providing jobs for over 2.1 million people, this equates to 7.2% of the UK's workforce¹. Construction contributes £90 billion value added to the UK economy (6.7 % of the total)².

It is estimated that over the next five years there will be more than 182,000 construction jobs created, mainly fuelled by the demand for 245,000 new homes across the UK each year. The Construction Industry Training Board's (CITB) Construction Skills Network (CSN) forecast tool³ shows that housing will account for over a third (37%) of the UK's annual construction output between now and 2018. It should, however, be noted that even with this predicted creation of jobs, employment levels will still be 196,000 down on their pre-recession peak.

The recent increased demand for employment has been buoyed by the Government's "Help-to-buy" scheme, particularly the element relating to equity support for those purchasing a new build, which has recently been extended to the end of this decade. However, major infrastructure projects over the coming years will also play a significant role in boosting activity – these include the planned development of HS2, which will also have significant implications within the D2N2 geography.

However, despite this optimism for growth, the sector also faces challenges in the face of the UK recovery to a global economic crisis, as identified by Andrew Rees, Acting Chief Economist and Head of AMS Strategy and Economic Department for Business Innovation and Skills, in its 2013 report on the state of play for UK construction:

"The global construction market is, however, facing major transformation as businesses continue to respond to the challenges of the economic crisis since 2008, begin to shift to green and sustainable construction, and seek advantage of the opportunities provided by the digital economy. The competitiveness and readiness of the UK construction sector will be crucial if the UK is to take advantage of these opportunities"

In response to these challenges, in 2013 the Government launched its consultation with business to create a national vision for the sector's development.

2.2 Construction Industrial Strategy – 'Construction 2025'

In July 2013 the Government began work with the construction industry to develop a construction industrial strategy, presenting a long-term vision for the sector. The work identifies those areas

¹ CITB – Construction "Building Skills for Growth

² HM Government Industrial Strategy - Construction 2025

³ CITB – Construction Skills Network – Blueprint for Construction 2014-2018 Labour Market Intelligence

and markets that Government believes will drive growth over the next decade. In its response, the CBI detailed the following key areas of influence for the sector's success⁴:

- **Commercial property:** Increasing business confidence will lead to increasing demand in the commercial property sector by 2025. However, spending will show weak growth in the next few years with high vacancy rates at present. Whilst overall demand will be modest in the short term, the market is more segmented in reality with strong demand in some areas. Trends in the sector of creative urban-led design, innovation in building management design and sustainability will increase in prominence.
- **Transport:** Investment in our rail network will exceed £9.5bn by 2025. Major investment in our road network will be needed as the UK economy is already losing up to £8 billion each year from congestion on the roads, which could potentially rise to £22 billion by 2025. There is currently a £10bn shortfall in funding for highways projects. The key priorities for clients in this sector are reducing their carbon footprint and ongoing innovation in design.
- **Housing:** There will be increasing demands for new homes from rising numbers of new households – with the biggest rises in demand coming from single and older households. We are currently building less than half the homes we need – and this is set to continue with around 221,000 new households per year in England. Consumer demand for energy efficiency and technologically smart homes will be standard by 2025. House builders are likely to build between 1.7 – 2.5m new homes by 2025.
- **Energy:** The UK needs to build £110bn worth of new power stations and generator facilities in the coming decade in order to ensure we keep the lights on and meet our carbon emission targets. 9-150 tonnes of cement and 25-150 tonnes of steel are needed for each megawatt of gas power, nuclear or offshore wind. Increasing investment in renewable energy sources will need the expertise and innovation of the construction sector.
- **Digital Infrastructure:** The UK is a world leader in digital infrastructure and we will need large-scale investment by 2025 to maintain this competitive advantage. Key demands over the next decade will come from the roll out of 4G, upgrade to 5G and ongoing investment in broadband.
- **Water:** The water industry will see rising demand from industry and households and will need to manage the impact of climate change and water security. The sector will spend around £65bn by 2025 in upkeep and maintenance of facilities infrastructure and reservoirs.

As an outcome of this activity, the Government published 'Construction 2025', a joint strategy setting out how industry and Government will work together to put Britain at the forefront of global construction over the coming years. In this, the Government has developed the following set of aspirations for UK Construction:

- **PEOPLE** An industry that is known for its talented and diverse workforce
- **SMART** An industry that is efficient and technologically advanced

⁴ CBI "Building Britain's Future (2013)

- **SUSTAINABLE** An industry that leads the world in low-carbon and green construction exports
- **GROWTH** An industry that drives growth across the entire economy
- **LEADERSHIP** An industry with clear leadership from a Construction Leadership Council

These are backed up by the following quantitative aspirations to be achieved by 2025:

1. **A 33% reduction in both the initial cost of construction and the whole life cost of assets**
2. **A 50% reduction in both the overall time from inception to completion for new build and refurbished assets**
3. **A 50% reduction in greenhouse gas emission in the built environment**
4. **A 50% reduction in the trade gap between total exports and total imports for construction products and materials**

In developing an Action Plan for the D2N2 construction sector, it is important to consider the implication for these key drivers within the local geography, and how the sector in D2N2 is meeting the Government's national aspirations.

In addition to the above, 'Construction 2025' identifies the potential business opportunities from low carbon construction, suggesting that this area has the potential to drive future markets to 2025 and beyond. This is explored further below.

RECOMMENDATION 1

Improve access to public sector land to enable developers to fulfil increased demand for housing, scoping exercise to identify areas suitable for development and to smooth the planning process

Lead: D2N2 LEP Activity

RECOMMENDATION 2

Improve links between education and training providers to meet the future needs of the sector, ensuring that curriculum and training provision is linked to future demands including the emerging volumes of activity around nuclear build and the green agenda

Lead: Construction Ambassador

2.3 Emerging sector – Green Construction

The UK has the sixth largest green construction sector in the world and there will be additional employment opportunities in this area, with around 60,000 jobs expected to be supported by the insulation sector alone by 2015.

The McGraw Hill Construction (2013) World Green Building Trends⁵ report shows the global market for green construction to be growing, with 28% of architects, engineers, contractors,

⁵ McGraw Hill, Construction (2013) World Green Building Trends – Business benefits driving new and retrofit market opportunities in 60 countries

building owners and building consultants around the world reporting that they are focusing their work on sustainable design and construction by doing at least 60% of their projects green, doubling from only 13% of them at this level in 2009. The global green and sustainable building industry is forecast to grow at an annual rate of 22.8% between now and 2017 as a result of increasing low carbon regulatory requirements and greater social demand for greener products.

Behind the growth of the Green Construction sector is a growing recognition of 'green' as being a business opportunity. There has been a distinct shift from 2008, when the top driver for green building was "doing the right thing" to 2012 where the drivers are client and market demand and where companies expect green to contribute to business benefits. This is combined with the dramatic growth in those who consider lower operating costs and branding/public relations to be important drivers.

From 2012 to 2015, the number of firms that are anticipating that more than 60% of their work will be green will grow from 45% to 68% in the UK. The sectors with the largest opportunities for green building include new construction and renovation projects, both areas where the UK is an established market place with an abundance of older building stock and a need to develop more homes.

In recognition of this opportunity, the Green Construction Board has developed a high level route map⁶ which identifies the work required for the built environment to achieve an 80% carbon reduction target by 2050. In doing this, the route map illustrates those built environment sectors which are the most energy intensive and therefore those markets with the greatest potential.

The Government's 'Construction 2025' strategy states that the potential business opportunities from low carbon construction are huge and they will drive future markets to 2025 and well beyond and that the global green and sustainable building industry is forecast to grow at an annual rate of 22.8% between now and 2017 as a result of increasing low carbon regulatory requirements and greater social demand for greener products. The Government headline target is to get a 50% reduction in greenhouse gas emission in the built environment.

This also relates to the ability to export skills and technology in green construction. The Department for Business Innovations and Skills report, UK Construction: An economic analysis of the sector highlights that the UK is in a good position to take advantage of global market opportunities in construction. This stems from UK's high reputation for construction services such as architecture and development of advanced technologies used in construction such as BIM. The UK also has a relatively higher proportion of patents related to construction in comparison to an average of G7 and BRIC countries.

To enable the D2N2 area to fully take advantage of this sector there needs to be a coordinated approach to developing the skills required to compete and innovate in the green construction market. A starting point is to develop links with the Universities and organisations such as Employer First who offer support skills development, knowledge transfer and innovation, it also requires the link between the sector growth areas and curriculum development to ensure future skilled employees are in the pipeline. The task lies in ensuring that the construction sector,

⁶ <http://www.greenconstructionboard.org/index.php/resources/routemap>

especially SMEs, are fully aware of these opportunities and understand the potential in developing in these markets and how best to engage with the education and training sector.

This also relates to ensuring that the construction sector remains competitive in the procurement process, especially when addressing some of the green targets set in public sector contract, and which are becoming more prevalent in private contracts.

RECOMMENDATION 3

Develop and deliver a training package for SMEs around green construction, which includes Building Information Modelling (BIM), and supports aesthetic design principles to support the reduction of waste and improve efficiencies.

Lead: HEI/FE/Training Provider Activity

RECOMMENDATION 4

Create, or build on current activity, to provide a sector specific construction network which will improve links between academia and business to support the development of skills and product innovations.

Lead: Construction Ambassador Activity

MORGAN SINDALL



Morgan Sindall has been appointed to construct the UK's first carbon neutral laboratory - for the GlaxoSmithKline Carbon Neutral Laboratory of Sustainable Chemistry for The University of Nottingham. The laboratory, which is being part-funded by GlaxoSmithKline, will house The University of Nottingham's Centre for Sustainable Chemistry, which will serve as a hub to catalyse new collaborations with industry. The centre will be unique in the UK not only in its design but also in its focus on world-leading research activity in sustainable chemistry.

The building will occupy 4,500 sq m over two floors. In addition to laboratory space for around 100 researchers, it will also contain dedicated instrument rooms, a teaching laboratory for advanced undergraduate classes, and space for a range of outreach activities.

Located on The University of Nottingham's award-winning Innovation Park, the new carbon neutral laboratory building will provide unrivalled facilities for chemistry. The focus on sustainability will be reflected in the building itself, which will incorporate the latest technologies to allow it to be carbon neutral over its lifetime.

The building is set to achieve a BREEAM (Building Research Establishment Environmental Assessment Method) rating of 'Outstanding' and LEED (Leadership in Energy and Environmental Design) 'Platinum' rating. It is set to reach carbon neutral status after 25 years.

The laboratory will be built from natural materials and energy required to run it will be met by renewable sources such as solar power and sustainable biomass. Excess energy created by the building will provide enough carbon credits over 25 years to pay back the carbon used in its construction.

Case study: GSK Carbon Neutral Laboratory of Sustainable Chemistry - The University of Nottingham, the world's first carbon positive commercial building

2.4 UK's position in the Global market

Output in the global construction market is forecast to increase from around \$8.5 trillion to \$12 trillion in 2025⁷, with the UK well positioned to benefit from this increase in activity. The 2013 Department for Business Innovations and Skills (BIS) report, UK Construction: An economic analysis of the sector⁸ highlights the UK's high reputation for construction services such as architecture and development of advanced technologies used in construction such as Building Information Modelling (BIM). The UK also has a relatively higher proportion of patents related to construction in comparison to an average of G7 and BRIC countries. Supporting this, in a press release on the 26 May 2014 Business Secretary Vince Cable said:

"The UK has a strong competitive edge in building modern and environmentally friendly cities, through our world-class expertise in architecture, consultancy, design, IT and engineering."

An example of this in action comes from China; where there is local pressure to develop buildings to British green construction standards. The UK construction firm, Building Research Establishment (BRE), recently signed an agreement with the Shenzhen Municipal Government to set up training and R&D centre in China's fastest growing city. The centre will deliver training on a national scale to other cities and promote its services including certifying buildings to the green construction standards.

However, despite the UK's technological capability, the picture on construction exports is mixed across its sub-sectors. UK exports in construction contracting have been growing steadily to give a trade surplus of about £590 million in 2011. The UK is also strong in exports of architecture and quantity surveying services, with a trade surplus of about £530 million in 2011. On the other hand, the UK's trade performance in construction related products is less positive with a trade deficit of about £6.2 billion in 2012.

The BIS report also shows that a relatively small proportion of UK construction contracting firms are exporters comparing to other sectors. In 2012, about 6% of construction contracting SMEs were exporting. Of those contracting SMEs that are non-exporters, about two thirds said that they did not have a product or a service suitable for exporting and a quarter said that exporting was not part of their business plan, suggesting that construction businesses may not be fully aware of potential benefits of exporting and lack the necessary knowledge or management skills to successfully exploit overseas markets. UK construction companies tend to be smaller and collaborate less in comparison to many European countries that may make accessing foreign markets more difficult.

Exporting of construction contracting is relatively strong with a UK export surplus of architecture and quantity surveying services, however there is a trade deficit when it comes to construction related products.

BIS report that there are a relatively small proportion of UK construction contracting firms who export compared to other sectors. Of those contracting SMEs that are non-exporters, about two

⁷ Global Construction 2025 - Global Construction Perspectives and Oxford Economics

⁸ Department for Business Innovation and Skills report – UK Construction: An Economic Analysis of the Sector (July 2013)

thirds said that they did not have a product or a service suitable for exporting and a quarter said that exporting was not part of their business plan, suggesting that construction businesses may not be fully aware of potential benefits of exporting and lack the necessary knowledge or management skills to successfully exploit overseas markets.

D2N2 is arguably well positioned to take advantage of global markets bringing together the expertise within the universities alongside support from UKTI and Global Chambers initiatives to explore product development and innovation, green technologies and exportable skill-sets.

In comparison there are a relatively low number of other LEPs which have prioritised construction within their Strategic Economic Plan delivering a range of activity. Twelve of the thirty nine LEPs areas have identified construction as a priority, some identify the sector as a whole, some have left the sector descriptors fairly ambiguous and others have prioritised areas such as infrastructure and housing. The twelve areas identified are:

- South West: Heart of the South West, West of England, Dorset
- South: London, Buckinghamshire, South East
- Central: D2N2, Northamptonshire
- North: North East, Humber, Sheffield, Cumbria

RECOMMENDATION 5

Supporting increased activity in export markets, linking in with product development and innovation, drawing on UKTI and Global Chambers Manager and DNLCC International Relationship Manager to develop a sector specific support offer. This should also feed into the use of BIM and the delivery of flexible and adaptable courses to meet the requirements of our SME's and micro businesses which will ensure the sector can meet the contractual requirements set in OJEU

Lead: Export – UKTI, Global Chambers, Chamber International Relationship Manager



This family-run business employing 130 people at its 54,000 sqft workshop in New Ollerton, Nottinghamshire is the UK market leader in the design, manufacture and installation of commercial and industrial chimney, flue and exhaust systems.

A1 Flue Systems has worked on some of the UK's flagship construction projects including:

The Shard—the iconic building on the London skyline

20 Fenchurch Street - designed by Rafael Vinoly and has earned the nickname "the walkie-talkie" for its unusual shape. It is a 509ft Skyscraper building in London which will provide 688,000sq ft of premier office accommodation, retail units, a cafe and a unique publicly accessible sky garden - the highest public park in London.

King Cross T1 Development – contracted by Vital Energi, the company responsible for delivering sustainable energy supply for the new 67 acre King's Cross T1 Development.

Case Study: A1 Flues

2.5 Health and Safety in the Construction Sector

Health and Safety is an important feature of the UK Construction sector due to the nature of much of the activity and any activity to support sector growth needs to also take into account measures to support a healthy workforce.

In the foreword of the HSE Construction Division Plan of Work 2014/15⁹ Heather Bryant, the Health and Safety Executive's Chief Inspector of Construction, highlights that:

"The economic picture for construction is encouraging, with signs of sustained growth; however, this brings with it challenges. Research tells us that with market upturns, particularly in construction, we see increases in fatal and other accidents. We want to make sure history does not repeat itself so we are challenging the industry to be ahead of the game. Health and safety risks need to be recognised and acted upon as work pressures pick up and less experienced workers are hired, engaging with the workforce and ensuring good training and supervision as new recruits build skills and experience is vital"

Although construction accounts for 5% of the employees in Britain it accounts for 27% of fatal injuries to employees and 10% of reported major injuries. In 2011/12 there were 39 fatal injuries in the construction sector, approximately 3,700 occupational cancer cases, with an estimated 1.4 million working days lost.

However, as a result of efforts by HSE and businesses, there have been significant reductions in the number and rate of injury over the last 20 years or more. The HSE is currently consulting on a revised version of the Construction (Design and Management) Regulations 2007, with key policy objectives being to simplify the regulatory package while maintaining or improving worker protection, with a particular focus on smaller sites.

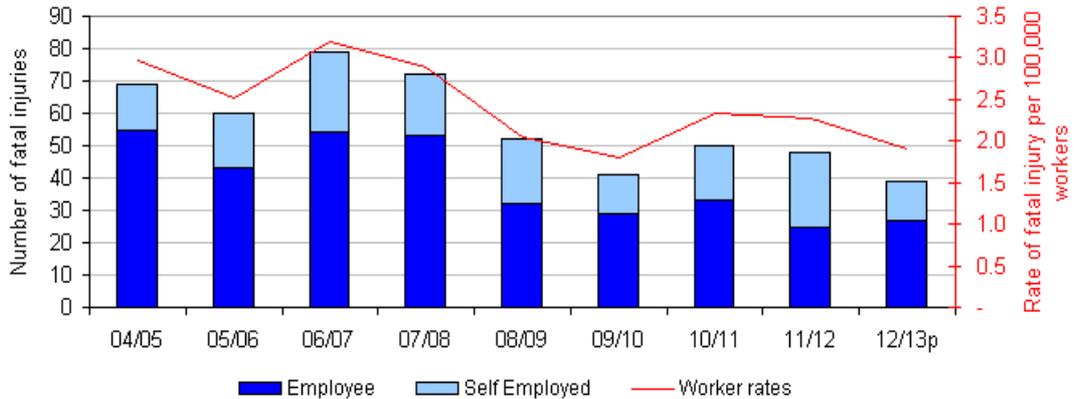
The latest results in construction show:

- 39 fatal injuries. 12 of these fatalities were to the self-employed. This compares with an average of 53 over the previous five years – including an average of 18 to the self-employed – this is ascertained from Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)
- about 3,700 occupational cancer cases are estimated to arise each year as a result of past exposures in the construction sector
- there were an estimated 74 thousand total cases and 31 thousand new cases of work-related ill health
- an estimated 1.4 million working days were lost in 2011/12, 818 thousand due to ill health and 584 thousand due to workplace injury, making a total of 0.7 days lost per worker

⁹ HSE Construction Division Plan of Work 2014/15 <http://www.hse.gov.uk/construction/work-plan-2014-15.pdf>

Fatal Injuries

The graph below shows the number and rate of fatal injuries to workers in



construction

The main causes of workers fatalities were:

Injury kind	Proportion of fatalities in		
	Construction 2012/13p	Construction	All industries
		(2008/09-2012/13p)	
Falls	59%	49%	25%
Being struck by a falling/moving object	3%	10%	16%
A collapse/overturn	5%	11%	10%
Being hit by a moving vehicle	10%	10%	15%
Electricity	5%	7%	4%

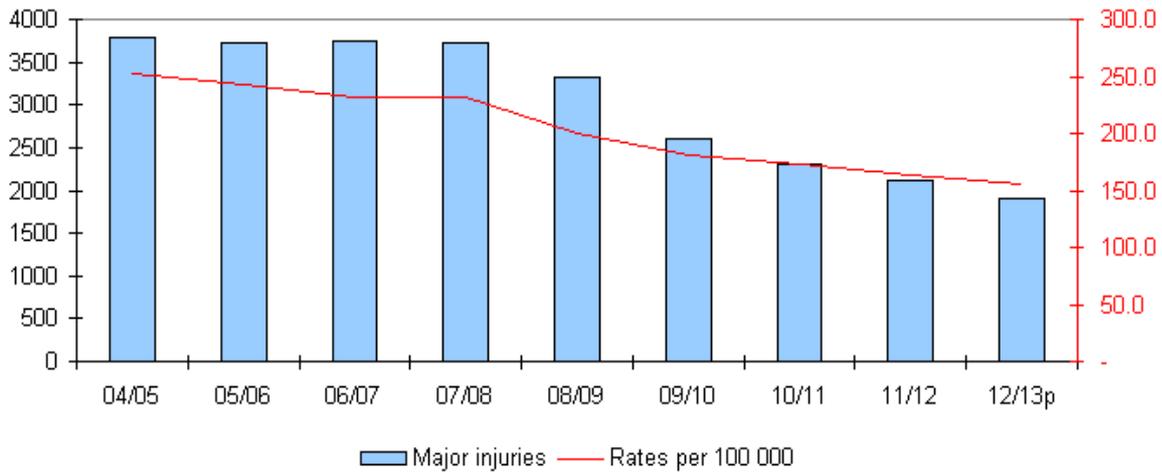
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The number of fatalities has fallen substantially since 2010/11, returning to the level seen in 2009/10, however this could easily be reversed in a sustained recovery.

Major injuries

There were 1913 reported major injuries to employees in 2012/13p, compared to an average of 2815 over the previous five years. There has been a general reduction in the rate of reported major injury since 2004/05. The number of reported injuries has also fallen significantly over the last five years. The fall in reported major injuries over the last two years is similar to that for all industries, but it was significantly higher in the previous three years.

The following graph shows the number and rate of major injuries to employees in construction (RIDDOR)



The most common causes of major injury to employees were:

Injury kind	Proportion of reported major injuries		
	Construction 2012/13p	Construction (2007/08-2011/12)	All industries (2008/09-2012/13)
Falls	28%	28%	15%
Slips, trips and falls on the level	28%	26%	40%
Being struck by moving/falling objects	15%	15%	11%
Handling	8%	13%	11%

Moreover, the HSE’s Construction Division Plan of Work 2014/2015 identifies a number of specific projects that they intend to take forward with key stakeholders and intermediaries. Key areas of collaboration include:

- Supporting the Working Well Together (WWT)¹⁰ programme in raising awareness of health and safety issues within micro and small construction businesses. Supporting WWT Groups to deliver at least 60 events during 2014/15 and create new groups when the opportunity arises.
- The development of a simpler and more easily understood revised regulatory package to replace the Construction Design and Management (CDM 2007) Regulations 2007¹¹
- Working with industry partners to develop guidance to support the CDM 2007 regulatory package.
- Finalising a review of the agreement for collaboration between HSE and the Building Control Alliance.
- Work with industry stakeholders to identify channels through which guidance and key messages can be delivered to small sites.

In addition to the national perspective and subsequent approaches to improving health and safety, feedback from the construction sector in the region has highlighted some additional ideas where the sector should be encouraged to work towards the goal of attaining a zero accident rate:

- Ensuring that local colleges and other training providers include relevant health and safety elements within all their construction related courses. If possible, this should be interwoven into the subjects covered, not a stand-alone module. This encourages students to think of health and safety as fully integrated into their trade, and not an 'add-on'. It is felt that this element is currently failing in the colleges and the experience is that this is not high enough up the agenda – by making it part of students DNA on arrival to the sector, incident frequency could be reduced.
- As the UK Contractors Group (UKCG) recognise CSCS, and its affiliates, anyone coming out of college should already have a **trade specific** CSCS or affiliated card.
- Safety and other professionals from larger contractors and framework providers to support colleges in 'teaching' elements of the health and safety syllabus, relating them to real life examples from the field. This may be by providing information resources, organising speakers, or assisting with visits to sites for general or specific safety topics.
- Raising the level of awareness amongst the workforce of occupational health. Health has always been the poorer relative to safety due to the often long periods before any effects from health issues. However the HSE, UKCG, and major contractors such are trying to redress the balance. Health is not often covered within training syllabus for construction related occupations, often due to lack of understanding by those teaching the subject.
- Working with local training providers proactively to ensure that training is available for all required safety specific subjects taking into account individual company requirements, and areas that the industry is targeting for improvement.
- Consideration should be taken to understanding that the industry is now in a period of growth, with an ageing demographic, and therefore we may see a shortage in the region of quality Health and Safety professionals. This is an area where careers advisors need to have an awareness of the range of occupations, including Health and Safety Manager, within the sector.

¹⁰ Working Well Together <http://wwt.uk.com/>

¹¹ The Construction (Design and Management) Regulations 2007 (CDM) <http://www.hse.gov.uk/construction/cdm.htm>

The above feedback was forwarded to the training provider representative from the sector consultative group; the comments in response to the above points are as follows:

H&S is delivered as a standalone unit of most construction programmes delivered at colleges; this is a mandate from the awarding bodies however it is difficult to simulate true building site environments. The H&S modules are very similar to the CSCS training and should a student wish to take the test it should be relatively easy to achieve.

The main barrier to providing the CSCS tests within colleges appears to be that this element does not attract any funding and is therefore an additional cost to the college or the student.

Colleges would welcome support from the larger contractors and framework providers to develop the "teaching" element of the health and safety syllabus, to relate to real life examples. This could be expanded to site practices and new technologies, with regards to the latter colleges have to rely on manufacturers to provide demonstrations. This also would support raising the awareness of occupational health to provide information from current practitioners.

It is vital that a growing sector in D2N2 responds to the additional health and safety challenges that this will bring.

RECOMMENDATION 6

Support of the initiatives set out by the HSE in their Construction Division Plan of Work 2014/2015.

Supporting better interaction between HSE, Colleges, Training Providers and employers – to be included in sector specific network

Lead: Construction Ambassador



Chesterfield Market Hall

Si Yuan China Studies Building, University of Nottingham

A family run construction business formed in 1892 and based in Derby GF Tomlinson delivering across a range of different sectors such as leisure, commercial, retail, education healthcare and industrial.

GF Tomlinson embraces new ways of thinking and delivers projects which are innovative, environmentally responsible and sustainable working to BREEM standards. Regional projects include the £3.6m Chesterfield Market Hall project on behalf of Chesterfield Borough Council and the £3.1m Si Yuann China Studies Building built on behalf of the University of Nottingham.

Case study: G F Tomlinson

3. THE D2N2 CONSTRUCTION SECTOR PROFILE

3.1 Scale of Construction activity in D2N2

Due to the mechanisms of information collection, much of the data that exists to analyse the construction sector does so only at a national and regional level. Sub-regional level is available for some aspects of the sector, but it is important to note that this comes with some limitations. Construction companies in the D2N2 region make up 43% of the total East Midlands.

Headline data (July 2013) for the D2N2 region¹² provides a snapshot of where construction lies within the local economy. Construction:

- is a similar size to the financial services sector generating 8% of GVA in D2N2
- employs circa 70,000, or 1:12 people on the D2N2 LEP area
- has nationally half its employees qualified at A level equivalent or above
- creates 3,200 jobs for every £100m invested in projects
- generates £2.84 for the economy for every £1 spent
- is 40% more labour intensive than manufacturing

Additional information provided by the Sector Strategy Team at CITB gives some indicative data on the split of size of businesses that are in scope of their levy¹³ as follows:

- 2,006 micro businesses (zero levy liability)
- 328 small businesses (£0-1k levy liability)
- 59 medium businesses (£1k- £32k levy liability)
- 12 large businesses (>£32k levy liability)

Table 1 below demonstrates that, compared to the rest of the UK, the sector across the East Midlands as a whole has a higher reliance on industrial activity and housing repair and maintenance, with a smaller proportion of activity on commercial developments and non-housing repair and maintenance.

¹² CITB – Construction: Supporting the D2N2 LEP Strategic Economic Plan (July 2013)

¹³ The CITB Levy and Grants system supports training in the industry. All CITB registered employers can claim grant, even those who don't have to pay Levy. The industry asks CITB to collect an annual levy from all liable employers, which then funds advice, support and grants that are available to employers who train. Over 75,000 employers are currently registered with CITB and all are required to complete an annual Levy Return, however only those with a wage bill that is £80,000 or more per annum will be required to pay a levy. Further details <http://www.citb.co.uk/levy-grant/how-levy-and-grants-work/>

Table 1: Comparing the UK Construction industry structure (2012) to the East Midlands¹⁴

% of total output	UK	East Midlands
Public Housing	4%	3%
Private Housing	14%	15%
Infrastructure	12%	13%
Public non-housing	10%	11%
Industrial	3%	6%
Commercial	21%	18%
Housing repair & maintenance	16%	18%
Non-housing repair & maintenance	20%	16%

3.2

Construction jobs in D2N2

In terms of what the above means for employment figures, using East Midlands-level data taken from the CITB Construction Skills Network (CSN) Blueprint for Construction 2014-2018 Labour Market Intelligence (Source CSN, Experian), it is possible to extrapolate figures for current employment levels in different parts of the sector, both for this year and up to 2018 (see table below).

Table 2: Total employment by occupation – D2N2 Region

Job Role (Table 2)	2014	2018
Senior, executive, and business process managers	4571	4605
Construction project managers	993	1131
Other construction process managers	5564	6128
Non-construction professional, technical, IT and other office-based staff	9512	9580
Construction trades supervisors	684	722
Wood trades and interior fit-out	6484	7104
Bricklayers	1557	1557
Building envelop specialists	3543	3466
Painters and decorators	2683	2679
Plasterers	1926	1836

¹⁴ Source: ONS, Experian 2012, taken from CITB Construction Skills Network – Blueprint for Construction 2014-2018 Labour Market Intelligence

Roofers	727	757
Floorers	3884	740
Glaziers	1183	1127
Specialist building operatives (not classified elsewhere)	2550	2494
Scaffolders	172	133
Plant operatives	1496	1466
Plant mechanics/fitters	1638	1995
Steel erectors/structural fabrication	636	688
Labourers (not classified elsewhere)	2494	2326
Electric trades and installation	5732	5605
Plumbing and HVAC Trades	4076	4605
Logistics	490	533
Civil engineering operatives (not classified elsewhere)	916	1032
Non-construction operatives	1075	1053
Civil engineers	1496	1527
Other construction professionals and technical staff	3251	3487
Architects	245	241
Surveyors	2344	2313

Data taken from CITB Construction Skills Network (CSN) Blueprint for Construction 2014-2018 Labour Market Intelligence (Source CSN, Experian) then calculated against the number of construction companies in the D2N2 Region (43% of total East Midlands) detailed on the Office of National Statistics Inter Departmental Business Register taken on 12th March 2013

The figures above would suggest little change in overall employment figures between 2014-18. CITB suggest that the region is set to see construction employment increase at an average rate of 0.7%, lower than the UK rate of 1.2%. The average annual recruitment requirement for the East Midlands is 1,980, among the lower figures across the other regions and devolved nations.

The lower predictions are a result of projections that suggest over the next five years performance across the region will be slower to feel the effects of the return to growth than the UK as a whole, with an estimated +1.1.% change in growth compared to UK wide growth of 2.2%. Repair and maintenance output is expected to pick up by 1.2% per year on average – a slightly better growth rate than new work (1%) over the same period. The private housing sector is expected to be the strongest performer, with annual average growth of 4.3%.

However, while the lack of growth at face value is disappointing, these figures do not fully take into account additional development activities within the D2N2 region as identified in the Strategic Economic Plan. What the figures demonstrate is a strong base within D2N2 from which

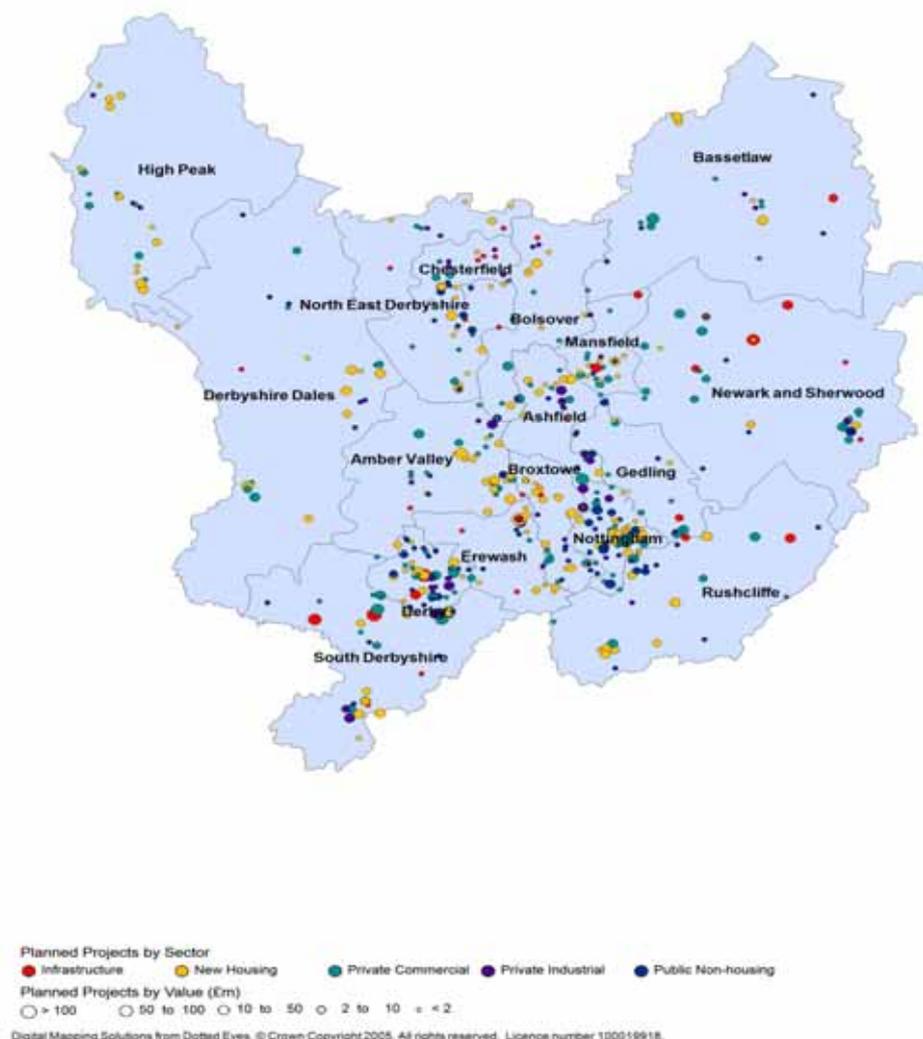
to grow and, managed correctly, the additional opportunities in the region bring with them significant opportunities for greater growth and success in the sector.

Indeed, as a sector in D2N2 there is a great need to understand economic development targets to allow for improved forward planning of resources and to provide confidence in future opportunities, one of the major challenges for any business is to understand potential opportunities and to then position and align resource to bid and deliver them.

3.3 Planned projects

Data provided by the CITB has been used to develop a map of planned construction projects in the D2N2 Region, listing planned projects by sectors: Infrastructure; New Housing; Private Commercial; Private Industrial; Public Non-housing. The sizes of the dots are indicative of the project value. Some of these are explored further in Section 4.

Map 1 –Planned construction projects for the D2N2 area taken from Construction Supporting the D2N2 LEP Area document March 2014



This activity responds to the call in 'Construction 2025' for *“Industry and Government will work together to develop and refine the pipeline of future work opportunities and make it more useable for all construction businesses”*. To expand on this commitment Barbour-ABI¹⁵ is now assisting Government in the development of the pipeline and in making it more accessible and easier for businesses to use. During 2013/14 the pipeline will move from a spreadsheet to a database/website, which will be much easier to interrogate. A new web portal will create a single access point to all the information Government has collected on its future work programme for construction. Bringing both the infrastructure and construction pipelines together in a single place will make it easier to interrogate the data. Users will be able to search in a number of ways including by sector, by region, and by value.

¹⁵ Barbour ABI Government Construction and Infrastructure Pipeline <http://www.barbour-abi.com/gcip.php>

However, while this work is of use within D2N2, its full potential is arguably not being realised as of yet. There is potential to take this work further – as has been done in Greater Manchester – by clarifying the confirmed pipeline of work currently within the planning system and analysing the upcoming value to the economy of future construction output over the next four years. This activity has also allowed indicative labour requirements to deliver the current known pipeline to be published and to estimate the additional number of construction qualifications required onsite until 2017.

Labour Market Information (LMI) data with regards to sight of market opportunities and availability of skilled labour was also something that the sector felt was patchy. These are two separate asks which intertwine so should not be looked at in isolation.

With regards to access to details of future construction and infrastructure projects there is data available through portals such as [Glenigan](#) and [Barbour ABI Government Pipeline Portal](#) but more needs to be done to promote these offers. The main concern was focused around smaller localised opportunities and what can be done to improve visibility of these opportunities, it was thought that working with local authorities and framework providers may improve this situation. Details from the DNLCC QES (Q4) show that 37% of construction companies highlighted that improving procurement practices was “critical” or “very important” to their business. There should also be consideration as to whether procurers in the region can standardise their Pre-Qualification Questionnaires by using PAS91.

When asked whether there is sufficient access to LMI data the construction consultative group responses are as follows:

- 64% thought that there is insufficient LMI with regards to training provider provision
- 78% thought that there is insufficient LMI with regards to availability of skilled labour
- 55% thought that there is insufficient LMI with regards to the availability of local/regional sub-contractors

From feedback from the sector it was felt that working relationships and collaboration between construction companies, framework providers and local authorities needs to improve and that there should be more input from large procuring bodies to reduce piecemeal procurement and improve transparency of pipeline opportunities.

As a sector there is a need to understand economic development targets to improve forward planning of resources and to provide confidence in future opportunities, one of the major challenges for any business is to understanding potential opportunities and to then position and align resource to bid and deliver them.

Work commissioned by the Greater Manchester Chamber of Commerce in their report – *Greater Manchester Construction Sector Pipeline Analysis*¹⁶ provides an insight into how this detail can be used to provide an insight into the type and use of this information This report seeks to give confidence to the construction industry by clarifying the confirmed pipeline of work currently within the planning system and to analyse the upcoming value to the economy of future construction output in Greater Manchester over the next four years. It also publishes for the first

¹⁶ <http://gmchamber-stage.s3.amazonaws.com/attachments/930/original.pdf>

time indicative labour requirements to deliver the current known pipeline and to estimate the additional number of construction qualifications required onsite until 2017.

The benefit of this type of work is reflected in the Governments 'Construction 2025' Industrial Strategy which highlights their commitment to ensure *"Industry and Government will work together to develop and refine the pipeline of future work opportunities and make it more useable for all construction businesses"*.

To expand on this commitment Barbour-ABI is now assisting Government in the development of the pipeline and in making it more accessible and easier for businesses to use. During 2013/14 the pipeline will move from a spreadsheet to a database/website which will be much easier to interrogate. A new web portal will create a single access point to all the information Government has collected on its future work programme for construction. Bringing both the infrastructure and construction pipelines together in a single place will make it easier to interrogate the data. Users will be able to search in a number of ways including by sector, by region, and by value.

RECOMMENDATION 7

Commissioning of D2N2 pipeline analysis, in collaboration with East Midlands Councils to explore cross working with other LEPs.

Lead: D2N2 LEP Activity

RECOMMENDATION 8

Commissioning of an SME subcontractor portal which details companies which hit agreed criteria for inclusion on frameworks and local authority supply chain lists. Encourage public sector buy-in and usage of the portal This will improve visibility to larger contractors and should include a service to upskill SMEs to become eligible for inclusion. PQQ standardisation should also form part of this process.

Lead: D2N2 LEP Activity

RECOMMENDATION 9

Work with public sector procurement bodies to standardise PQQs and to encourage their buy-in to adopt this process.

Lead: D2N2 LEP Activity



Fairgrove is a family home building business formed in 1995, by Steve & Christine Midgley and has grown into a regional developer of new homes building up to 50 new homes per year. Fairgrove Homes' strength is in their ability to customise new properties to suit the buyer's requirements, which is ideal for those with disabilities and mobility problems, resulting in a comfortable, brand new property that costs less than it does to refurbish an existing property.

Their **Custom Build** offer provides the buyer with the opportunity to personalise the home with additional extras at the planning stage, before construction even starts. Fairgrove Homes is providing this new option at a range of developments across Nottinghamshire and Derbyshire, and is already working with a buyer at its 'Orchard' development in Morton, Derbyshire, to personalise their new home with adaptations at little extra cost.



Case study: Fairgrove Homes

4. DRIVERS OF FUTURE GROWTH IN D2N2

During the 2015/16-2020/21 period, over £2bn of public sector resources will be invested in economic growth activities across the D2N2 area, including nearly £1bn of investment in transport and economic infrastructure; almost £500m in innovation and low carbon activities; over £400m in employment and skills; some £200m in housing and regeneration and nearly £140m to support businesses and ensure they are able to access the finance they need to grow and prosper. This will complement investment already being made by private sector businesses across the D2N2 area and stimulate additional private sector investment by unlocking the development of key employment and mixed use sites.

The investment will come from a wide range of public and private sources, including over £600m expected to be invested by the nineteen local authorities (based on existing levels of expenditure); over £500m to be invested by the three Universities; nearly £220m from the European Structural and Investment Funds; and an estimated £150m from the Homes and Communities Agency. It will build on investment made in the Nottingham City Deal. In addition, the LEP will seek some £450m of investment from the Local Growth Fund, to be focussed on economic infrastructure to unlock growth, the renewal of the FE capital estate, and business support for key sectors.

Managed correctly, this brings with it significant opportunities for the D2N2 construction sector to expand. To ensure this happens, public sector procurement needs to be led and informed by the private sector to ensure that the prescribed outputs included as additionality within contracts deliver the best value for both parties. Opportunities to capitalise on the new EU Procurement Directives, if applied correctly, will also ensure the development of more focused and prescriptive social outcomes.

Working in partnership with public sector procurers to achieve more focused and meaningful outputs from Section 106 and Community Infrastructure Levies, expanding on the Client Based Approach Model developed by the CITB

The procurement process also needs to encompass developing a more sustainable industry that improves efficiencies to deliver low carbon assets more quickly and at lower costs.

RECOMMENDATION 10

Build on the Client Based Approach model developed by CITB to improve outputs to create a more effective, competitive public sector procurement process. Bring together relevant parties to formalise a process to improve better outputs.

Lead: D2N2 LEP activity

Case study: CITB Client Based Approach



Client-based Approach

Summary

The National Skills Academy for Construction is a project-based training concept, facilitated by CITB. Its Client-based Approach is a tailored solution for public sector clients, and enables delivery of increased local employment and training opportunities through the planning and/or procurement of construction projects. Their toolkit provides all of the necessary components to deliver apprenticeships, employment and training opportunities on any type and size of construction project.

Detail

- 1) The Client Based Approach contains a series of benchmarks (targets) which can be applied to any type and size of construction project. From new housing developments to offices, hospitals and infrastructure projects, the benchmarks have been created by the construction industry so clients can be confident that they are proportionate and achievable. The benchmarks have been designed to be applied to both new build projects and repair and maintenance contracts.
- 2) The benchmarks are set against 14 KPI's (employment and skills areas) which remain constant, no matter what type and size of construction project they are being applied to. They include (but are not limited to):
 - Work Experience Placements
 - Curriculum Support Activities
 - Apprenticeships
 - S/NVO's
 - Graduate Recruitment
 - Supervisor Training
 - Advanced Health & Safety Training
- 3) The guidance contains template legal clauses for the inclusion of employment & skills requirements in EU compliant procurement procedures, Section 106 Agreements and a whole variety of building contracts including JCT, NEC3 and PPC2000.

Benefits

- Provides clients with an EU compliant, end-to-end procurement process
- Comprehensive advice & guidance for clients when negotiating S106 agreements
- Demonstrates the clients commitment to the Public Services (Social Value) Act 2012
- Eligibility to join the National Skills Academy for Construction network
- Creates opportunities for clients to share good practice and lessons learned
- Delivery of increased employment opportunities = reduction in local benefits bill
- Develops partnership working & provides support for Local Enterprise Partnership priorities

Guidance and advice

The Client-based Approach guidance is supported by advice from CITB and Trowers and Hamblins LLP.

4.1 Proposed infrastructure projects identified in the SEP and through Barbour ABI pipeline work

Nottinghamshire

Development of the Creative Quarter – a programme which involves the expansion of Biocity, the provision of workspace to expand premises for new business, together with the refurbishment and upgrading of vacant properties. Development also includes the provision of a new physical College hub (Outputs: 7103 and 3350 dwellings – the Single Further Educational Hub will add an additional 490 jobs)

Nottingham Enterprise Zone – D2N2's priority project, supported by central government, the development of four sites within the Enterprise Zone will help open up access to the sites for employment and housing use, including improved pedestrian routes, upgraded canal bridge, cycle links, cycling facilities, bus and green infrastructure (Outputs: 6871 Jobs and 365 dwellings)

Broadmarsh and Southern Gateway- reinvigorating the southern entrance to the City Centre of Nottingham, this ensures the Southern Gateway including Broadmarsh will be transformed through transport and public realm infrastructure investment linked to the £150m investment (Intu and Nottingham City Council) in the Broadmarsh Centre, £40m new Station Hub, a new integrated college site and Nottingham Castle redevelopment (Outputs 9900 Jobs and 900 dwellings)

A46 corridor projects, Rushcliffe – Facilitating 3 urban extensions on the edge of Nottingham (Outputs: 2000 Jobs and 3500 dwellings)

A57/A60 Junction, Worksop – Major junction improvement and committed Local Transport Board Majors priority scheme (Outputs: Contributes to enabling 1805 Jobs and 3500 dwellings)

Sherwood Growth Corridor – Providing highway improvements to bring forward 5.8Ha of employment land and the Mansfield urban extension (Outputs: 1000 Jobs and 1700 dwellings)

Newark Southern Link Road – Unlocking a major strategic mixed use site to the south of Newark to facilitate an urban extension (Outputs: 800 Jobs and 4050 dwellings)

Derbyshire

Infinity Park - will exemplify Derby's future thinking and global influence within the advanced engineering sectors, including the automotive, rail and aerospace industries and their supply chains. The project delivers flood alleviation, highway access and other infrastructure works to accelerate delivery and open up Phase 2 of the Innovation Hub to provide world class innovation employment space, ICT business and technology support (Outputs: 2750 jobs)

Our City Our River, Derby – a comprehensive programme of capital infrastructure interventions, designed to unlock substantial economic regeneration of brownfield opportunity sites; incorporating innovative flood resilience, alleviation, and defence measures (Outputs 6000 Jobs and 600 dwellings)

Chesterfield town centre and A61 Growth Corridor – development of Chesterfield Waterside and commercial development around canal basin, includes A61 Whittington Moor Roundabout and major junction improvements (Outputs 3700 Jobs and 1990 dwellings)

Derby Wyvern A52 Pride Park – Major junction improvement and committed Local Transport Board Majors priority scheme -will support 3200 new jobs on Pride Park and the Derwent Triangle.

Rolls-Royce site, Hucknall – Access and infrastructure works to facilitate a 27.1ha business park and residential development (Outputs: 2200 Jobs and 900 dwellings)

Woodville/Swadlincote Regeneration Route and Drakelow Park – unlocking 35 hectares of land of land for redevelopment (Outputs 2160 Jobs and 2530 dwellings)

Markham Vale Enterprise Zone – Seymour Link Road. Regeneration Route and committed Local Transport Board Majors priority scheme (Outputs: 2114 jobs)

Key mixed Use sites in the Peak – new access routes to facilitate development of Ashbourne, Bakewell Riverside, Fairfield Link, Buxton (Outputs: 1450 Jobs and 1175 dwellings)

Improvements to the Derby College estate – Hudson Building at Pride Park, providing training focused on construction and Broomfield Hall in Morley which supports agriculture, horticulture and sports science.

Top projects identified by Barbour ABI *

Project Title	County	Project Value (£m)	Client
SINFIN LANE ENERGY FROM WASTE FACILITY	Derbyshire	70	Shanks Waste Management Limited
KUEHNE & NAGEL - DISTRIBUTION CENTRE	Derbyshire	45	Goodman International
INTU VICTORIA CENTRE - REFURBISHMENT	Nottinghamshire	36	Intu Group
NOTTINGHAM BUSINESS PARK - 290 HOUSING UNITS	Nottinghamshire	30	Barratt Homes North Midlands
BUTTERCUP LEYS - 284 HOUSES	Derbyshire	28.4	Persimmon Homes (North Midlands) Limited
NEW COLLEGE NOTTINGHAM - BASFORD HALL CAMPUS REDEVELOPMENT	Nottinghamshire	24	New College Nottingham
BAMFORD WATER TREATMENT WORKS - DAF VALIDATION	Derbyshire	18	Severn Trent Water Limited
TREETOPS - 190 HOUSES	Derbyshire	17.1	Taylor Wimpey
EDGEWATER PARK - 158 HOUSES	Derbyshire	15.8	Morris Homes (North) Limited
HOLMLEIGH WAY - 157 HOUSES	Derbyshire	15.7	Bellway Homes (East Midlands) Limited



Kuehne & Nagel Distribution Centre, Intu Victoria Centre, Treetops

Pipeline Projects Identified by Barbour ABI ¹⁷

Project Title	County	Project Value (£m)	Client
SNELSMOOR GRANGE DERBY	Derbyshire	100	Clowes Developments
SPORTS DIRECT STORAGE AND DISTRIBUTION CENTRE	Nottinghamshire	100	Sports Direct
HILTON DEPOT REDEVELOPMENT	Derbyshire	90	St Modwen Developments Plc
BILSTHORPE ENERGY CENTRE - ADVANCED GASIFICATION PLANT	Nottinghamshire	70	Waste2Tricity
GREENACRE CARE VILLAGE	Nottinghamshire	50	Horizon Care Homes Limited
DERBY COMMERCIAL PARK - PLOT L	Derbyshire	46.5	Goodman International
COPLEY FARM - 28MW SOLAR FARM	Nottinghamshire	28	South Kesteven District Council

¹⁷ Presented by Michael Dall, Lead Economist, Barbour ABI at the DNLCC/LEP Construction Forum 2nd June 2014

CHINOOK SCIENCES ENERGY PARK	Nottinghamshire	50	Nottingham City Council
LONDON ROAD - OFFICES/COMMERCIAL	Nottinghamshire	25	Oakhill Group
MACKWORTH COLLEGE DERBY SITE - HOUSING	Derbyshire	25	Strata Group (Yorkshire) Limited

4.2 Housing

The D2N2 LEP prioritisation to drive forward the SEP also includes accelerating residential development where substantial housing growth has been identified as a priority.

The number of households in the D2N2 region is projected to increase by 9,500 every year until 2033 and by 2020, an extra 220,000 people will be living in D2N2, with growth expected to be more concentrated in the urban areas of Derby and Nottingham. Responding to this a headline target of accelerating delivery of 77,000 new homes by 2023 is included in the SEP. This would entail a significant increase on current house building figures – between 2004-12 an average of 6,124 homes were built in D2N2 per annum, as per data provided by the Department for Communities and Local Government (DCLG). This figure is approximately 1,000 short of the estimated number of households created per annum – a shortfall that places pressure on the existing housing stock in the region.

Over this period there will also be significant changes in terms of household composition, putting additional strain on the available housing stock. DCLG trend analysis suggest significant increases in people living on their own or living in a household with the number of households with people aged over 65 year expected to increase by 60% by 2033.

On the face of it there are many factors that would support house building in D2N2. For the East Midlands as a whole, the average valuation of building land for housing with planning permission is the lowest of any region, at less than a fifth of the valuation of land in London and only 45% of the national average, with build costs also low compared to elsewhere in the country (Smith Institute, 2012). However, despite this the area has struggled to provide enough homes to meet demand in the region.

The shortfall of housing partly reflects the lack of (to date) sustainable, well-coordinated and robust local development plans, based on D2N2’s growing and changing population. Since the abolition of regional spatial strategies, local authorities have been asked to produce their own Strategic Housing Market Assessments – something that some smaller authorities have struggled with. There is a clear opportunity for the LEP, working with Local Authority Planning and partners such as East Midlands Councils to play a supporting role here.

Having robust housing plans will also support councillors and planning officers in championing development opportunities at a local level, where housing development is often contentious and plans are frequently frustrated by local communities who are anti-new development.

There are also greater opportunities for local authorities to increase access to public land for developers. Providing land free at the point of use (Build Now, Pay Later terms) or foregoing a receipt in return for an equity stake may help deliver more homes. Many local authorities are already actively pursuing this as an option, a move that should be supported by the LEP and developers alike.

In addition to supporting the bringing forward of locally-owned opportunities, there are also opportunities for the LEP and developers to lobby national Government to release public-sector owned land. According to the Government, there was 441 hectares of public sector owned

brownfield land in D2N2 (HM Government 2012) – for example former Ministry of Defence Sites or NHS land.

RECOMMENDATION 11

LEP to commission the development of robust Strategic Housing Market Assessments for local authorities where they don't exist (Reference Recommendation 1)

Lead: D2N2 LEP Activity

LOVELL



Castleward – Affordable Housing in Derby

A project developed for Compendium Living, Derby City Council and the Homes and Communities Agency Castleward is the redevelopment of 30 acres of brownfield land between Derby Midland Station and Westfield shopping centre, which will become a brand new neighbourhood of sustainable homes and businesses.

In total, as part of the Compendium Living joint venture with the Riverside Group will create 800 new homes and 34,500sqft of commercial space at Castleward.

Over the projects lifetime this project has set targets for providing employment and training opportunities directly through the development work which are:

- Creating and providing 17 apprenticeships
- Achieve vocational qualifications for 26 people,
- Provide work experience for 23 adults or young adults

The project endeavours to ensure that local people benefit from the employment opportunities generated by the development. The project groundwork sub-contractor has already directly employed 9 people from Derby on the project.

Case Study: Lovell, Castleward Affordable Housing

4.3 HS2

While a decision on the HS2 route and stations is not expected to be taken by the Department for Transport until the end of 2014, the proposed station at Toton, Staveley Maintenance Depot and associated infrastructure, bring with them massive opportunities for the constructions sector in D2N2. Both in terms of direct development activity, but more importantly the associated

regeneration work and additional infrastructure required - potential barriers to the success of HS2 in the East Midlands were identified by Atkins, working on behalf of the HS2 Growth Taskforce, as being a lack of available housing sites, low housing targets, and historically low rates of housing delivery.

In order to ascertain the potential benefit to the construction sector it is important that local planning is progressed beyond where it currently stands. Local partners have been asked to develop a growth strategy relating to the Toton station - it is vital that the experience of the construction sector be drawn upon in those discussions as local authorities look to ensure Local Plans can capitalise on the opportunities HS2 can bring.



Since 1885 Gleeds has built its reputation for delivering independent and trusted construction consultancy services across the UK and internationally. The business has grown to employ 1300 staff across 54 offices worldwide, specialising in providing expert advice and management services throughout the project lifecycle.

A combination of its UK heritage and global experience means Gleeds can provide clients with consultancy services in all sectors. The expertise of its in-house consultants range from major Government infrastructure and regeneration works, to luxury residential and commercial developments for private investors.

With an established presence in the East Midlands since 1932, Gleeds is passionate about supporting the socioeconomic development of the region. In 2011 the consultancy became an active supporter of the D2N2 Local Enterprise Partnership (LEP) and in 2013 provided funding advice for a £25 million redevelopment initiative with Alliance Boots to provide pivotal infrastructure works for £50 million of development in Nottingham's Enterprise Zone. The resulting investment package assisted in securing the economic development of the site for the long term and in the shorter term has funded the redevelopment of infrastructure, including land preparation and remediation activities, to help prepare it for commercial use.

Gleeds is a founding member of 'Team Nottingham', a regional group of city councillors and private sector companies that showcases the city's investment and development potential at MIPIM. The management and construction consultancy has also been a headline sponsor of the city of Nottingham for a number of years. In addition, the company is involved in strategic partnerships with organisations such as; Bombardier; Blueprint Limited; E.ON; Derbyshire City Council; The University of Nottingham; The University of Derby and Rolls-Royce



Case study: Gleeds



A Local Authority controlled company, based in Nottingham, wholly owned by Derby City, Derbyshire County, Gateshead, Nottingham City, Nottinghamshire County and Warwickshire County Councils in equal shares.

Scape acts as a Contracting Authority and Central Purchasing Body as defined in the EU Procurement Directives and aims to be leaders in collaborative working, providing cost effective solutions by using simple, easy to use and hassle free processes which deliver an inclusive and engaging experience for the client and the communities they serve.

Djanogly Northgate Academy, Nottinghamshire



A £2.15m project delivered through the Scape **Adapt Education** solutions to provide a quick affordable two story extension with 10 classrooms, amenities and associated external works for Nottingham City Council. The standardisation of design provided the client with robust cost and programme advice and reduced design fees by $\frac{1}{3}$ rd. Defects were also minimised (5 minor items on first phase only)

Wates Construction provided a full service to deliver the project – provision of consultants for architecture, structures, building services, landscape, furniture layout, party wall, surveys, planning and building regulation submission.

The project achieved the aim to allow an increase of pupil placements by 210 and to increase community involvement, the work also provided 2 work experience placements, 2 trade apprentices and a structured pupil integration programme.

Forest Fields Primary School, Nottinghamshire



A £5.2m project which involved extensive refurbishment and conversion of a Grade II listed building to provide a 1,610 sqm four –storey extension for Nottingham City Council, the scope of work included demolition to an existing building and refurbishment of 2 other existing school buildings providing 12 new class rooms, school hall, IT suite and administration offices.

The project delivered by Wates posed conservation issues which included restoration, English Heritage worked hand in hand to ensure the project was delivered as planned.

The project provided 6 work experience placements and 4 trade apprentices.

[Case study: Scape](#)

5 LINKING OPPORTUNITIES WITH SKILLS PROVISION

With regards to ensuring the workforce is in place to take advantage if the opportunities identified there are several areas where the LEP can focus activity. These are:

- Building Information Management
- Leadership and Management
- Apprenticeships and Traineeships
- Short Upskilling programmes
- attracting new talent

5.1 Building Information Management (BIM)

BIM is seen as a priority for the sector to ensure that construction companies are able to respond to the demands set in the procurement criteria, especially for public sector and EU contracts. BIM will be a mandatory requirement by 2016 and it is generally felt that this will inevitably move in to the private sector.

The European Parliament voted in January 2014 to support a range of reforms that encourage and require the use of BIM which are set to encourage all EU countries to recommend the use of electronic tools, such as BIM, on public sector contracts by 2016.

The intention of this change is to look to reduce building time, costs and waste – this aligns with the Governments ‘Construction 2025’ aspirations to achieve more for less in a sustainable and timelier fashion.

The reforms in the Directive cover all types of procurement and must be implemented into national law within two years of their publication in the Official Journal of the European Community (OJEU).

At the empa Procurement Forum on the 28th February 2014 Peter Hansford, HM Government Chief Construction Advisor stated that BIM is *“a key component that will transform the industry”*

Companies who are early adopters of BIM not only improve their procurement opportunities in the UK but additionally become more competitive in export markets. The development of a strategy and funding route to upskill and enable engaged supply chain members is a key need in D2N2

RECOMMENDATION 12

Access to funding to support small and micro design professional and construction companies to begin the BIM journey

Lead: D2N2 LEP Activity

5.2 Leadership and Management – driving career progression and supporting the identification of skills needs.

Regional construction companies reported in the Derbyshire, Nottinghamshire and Leicestershire (DNLCC) Quarterly Economic Survey, Q4 2013 that in the previous 3 months 34% of them had increased their labour force. However for those companies recruiting 55% had experienced problems finding suitable staff, the main areas of issue were around sourcing “Professional Management”.

One respondent, a large regional home builder, stated that they believe the skills gap challenge “is our biggest, current, constraint on volume growth” They highlighted that due to increased volumes from just about all house builders their immediate shortages are: Bricklayers; Joiners; Plasters; plumbers; engineers; quantity surveyors; site managers and experienced senior managers.

There are recurring concerns over the career progression of employees within the sector particularly around the ability of current leadership and the management to progress staff to management positions.

A follow up DNLCC survey shows that Leadership and Management was highlighted as an area of priority, however only 60% of respondents from the D2N2 LEP construction consultation group provide this to their employees. Reasons that this type of training is not currently provided are that:

- Training hasn’t been picked up since the downturn
- Time to release staff
- Cost is restrictive
- Available training isn’t specific enough for the sector.

The types of Leadership and Management training that would support the sector was around the clear progression from “tools” to “Supervisor” to “Site Management” moving to “Contract Management” and this should be allied to associated formal training. It was felt that Leadership and Management training should be led and organised by experienced and qualified construction people.

The issue of unfulfilled vacancies is also reflected in the UK Commission for Employment and Skills (UKCES) Employer Skills Survey 2013: Evidence Report 81 (January 2014) which shows that across the UK there is a 31% density of skills-shortage vacancies listed under “Managers” in the construction sector (see table below), although a high figure this is showing an improving trend. The report also shows that the provision of management training to employees was far lower than the average across other sectors with only 22% of the construction sector offering this type of training.

Density of skills-shortage vacancies by construction sector (UK %age)

	Managers	Profession als	Associate Profession	Administr ative/Cler ical Staff	Skilled Trades	Sales and Customer Service	Machine Operative	Elementar y staff
UK total all sectors	20	30	26	13	39	13	25	13
Construction	31	16	19	11	29	7	35	9

Densities are based on skill-shortage vacancies as a percentage proportion of all vacancies within construction sector, rather than the number of establishments with vacancies. Data taken from UKCES Employer Skills Survey 2013: UK Results (Evidence Report 81 January 2014)

RECOMMENDATION 13

Development and delivery of industry relevant leadership and management programmes to support and disseminate best practice

Lead: Skills providers network

5.3 Apprenticeships, Apprenticeship Training Agencies (ATA) and Traineeships – promotion of vocation routes and expansion of the ATA model

There is need to ensure that the apprenticeship model fits the needs of the sector. The further development of the Apprenticeship Training Agency (ATA) model supports apprentices who are employed on contracts shorter than the framework length, to ensure that this model continues to work and expand in the region additional support from employers is required – promotion of the benefits of the ATA model is key to its continued success.

From feedback from the sector the timing of apprenticeship vacancies was raised as an issue, this was specifically where there is a mismatch between the demands of employers and the timetables of schools. There was also concerns that this was compounded by way that careers advice was delivered in schools and colleges. A suggested solution is for employers to offer an extended work placement programme for post 16; this would enable candidates to take up an apprenticeship at the appropriate time.

When asked whether the engagement strategy for Traineeships, Apprenticeships and other funded training was effective there was a general feeling that this area was lacking. General concerns that there is especially little clarity on Traineeships by providers and little understanding from employers.

Concerns were also expressed over the implications of the changes proposed under the ongoing Richard Review of Apprenticeships; this was particularly a concern for smaller and medium sized employers – all parties would be concerned at an increase in the cost of Apprenticeships which is most probable with the proposed changes included in the Government consultation. Representatives from the sector generally thought that the current system was mostly fit for purpose. However changes suggested to the current system include:

- Longer programmes for technical trades and shorter programmes for operative frameworks.
- To ensure that frameworks reflect today's new technologies
- Better wage incentives for employers
- More on-site experience
- A different level of functional skills that are more relevant to the construction sector
- Consideration of office-based construction roles – current provision doesn't support this area
- More shared apprenticeships with flexible funding, terms and support with the management of same
- More work on introductory level apprenticeships in the Mineral Products Sector

With regards to the changes being made to the apprenticeship offer, from frameworks to competency standards, in response to the Richard Review, the opportunity to ensure the new

standards are fit for purpose may be available through the Trailblazer process. Phase 1 is underway but did not include areas in the construction sector; Phase 2 of the Trailblazers, announced in March 2014 will include the following within the construction sector:

- Construction – developing standards for Wood Occupations and an Assembly Technician
- Property Services – developing standards for a Property Maintenance Technician

Phase 3 will be announced in September 2014 and any organisation wishing to be involved in this process needs to express an interest before the 1st August 2014¹⁸.

Higher Apprenticeships were a route that is not fully exploited within the sector, if there are any developments in this area it tended to be in areas such as civil engineering. Other sectors, such as finance, seem to be more forward looking towards the development of higher apprenticeships to “grow their own” with a progression route from levels 2 & 3 through to Level 4 (Higher Education Certificate), Level 5 (Foundation Degree) moving through to Level 6 (BA/BSc) and Level 7 (MA/MSc).

When looking at the range of skills, aptitude, personality traits and sector training for young people entering the construction sector at various levels the overwhelming feedback was that the focus wasn't necessarily on qualifications but more on having the right attitude, willingness to work and all round employability skills. There is however the mandatory requirements demanded by the sector with regards to health and safety regulations.

Some of the main examples of what employers state they are looking for include:

- excellent time-keeping
- appearance
- attitude
- good social skills
- ready to learn
- a working knowledge of Microsoft Office applications.

Where young people have already undergone training there is an expectation that they can reflect this learning in the workplace.

When addressing career ladder expectations feedback from the sector was that they were not totally clear of what this would look like and they were therefore concerned that this wouldn't be clear to a young person. It was felt that there should be more work done in this area potentially using something similar to the “wiring diagram” of career progression which has been previously created by the CITB who have also created an online [Careers Progression Tool](#) to support this process.

In respect to a more specific area within the sector, mineral products, there is the possibility to progress using higher apprenticeships or a foundation degree route, this is a 2 to 3 year pathway for Mineral Extraction, Concrete, Cement, Asphalt or Clay Technologies, this route is through trainee to supervisor to assistant manager to manager/engineer.

RECOMMENDATION 14

Encourage employers to engage with current ATA models in operation within the D2N2 area.

¹⁸ Details need to be provided via email: apprenticeship.trailblazers@bis.gsi.gov.uk

Lead: Construction Ambassador
RECOMMENDATION 15

Work with sector skills council, employers and the National Apprenticeship Service to ensure that apprenticeships remain sector relevant, valuable and viable.

Lead: Employer Led Activity

5.4 Short Upskilling Programmes - development of “training bundles” for new and returning employees

In the development of the Skills Action Plan for the D2N2 LEP the sector highlighted that more focused activity is required around upskilling of the unemployed and those who have migrated away from the sector in the downturn by funding specific mandatory qualifications to achieve market entry level eligibility.

The Construction Industry Training Board (CITB) has a number of regional training operators who deliver training for the construction sector; these organisations survey their members as to their future specific training needs. Information provided by the Construction Action Group for Employers (CAGE) provides an insight into the types of training currently required, these show a strong emphasis with regards to health and safety related activity. Training requests include:

- Asbestos Awareness
- Site Environmental Awareness Scheme (SEATS)
- Site Supervisors Safety Training Scheme (SSSTS)
- Site Manager Safety Training Scheme (SMSTS)
- PASMA (Prefabrication training)
- Working at Heights
- First Aid
- Manual Handling
- Abrasive Wheels
- Mobile Platforms
- Cable Avoidance Training and Genny
- Updating and renewal of cards

CITB are working with regional Local Enterprise Partnerships through a Joint Investment Strategy (JIS) which will see CITB Levy funding matched by core cities in the UK, one of which is Nottingham. The data collated through organisations such as the Construction Action Group of Employers (CAGE) has been provided to inform the provision required to respond to the sector needs, especially around delivery of a cost-effective offer for small and micro companies. Scaling this offer across the D2N2 area is an important consideration for supporting the sector.

To support those individuals that are not in employment, education or training (NEETS) into the sector, a suggestion was made that mapping the provision to support the unemployed to access the sector would be useful, bringing together those initiatives, such as training providers which have Skills Support for the Unemployed programmes, Work Programme providers and the regional Big Lottery “Talent Match” initiatives. The DWP generally maps support for the unemployed on their District Provision Tool, this should be explored to avoid duplication. (Include in recommendations)

It was generally felt that the Sector Based Work Academy (SBWA) offer, used to support recruitment, was not widely known of in the sector, however where it was deployed it was felt

that it was a good tool to support employers and the unemployed. The SBWA provision should be driven by employers and supported by the DWP and providers to ensure that candidates get access to the most appropriate support; this should include bringing in other agencies to provide subsidiary support for clients where necessary.

Someone who is unemployed who has no previous experience of the construction sector would be expected to enter the industry at the lowest level, i.e. labourer. However, to enable a new entrant to work on a construction site safely there are a number of courses and accreditations that are a necessity to employment. At present all labourers must have a green CSCS card which is gained by simply taking and passing a health and safety test, however as of the 1st July this year all operatives that require a green card must also take a Level 1 Award qualification in Health and Safety in the Construction Environment as well as a Health and Safety test. There are concerns that this qualification, which is 4 credits (40 Guided Learning Hours), does not attract any funding through the Adult Skills Budget and will be a cost to the learner/employer.

Suggestions to overcome this are to encompass the Level 1 Award (which is very basic construction health and safety) with other short courses which could include: Working at heights; Confined spaces; Manual handling; Abrasive wheels; thus creating a labourer that has the correct cards and courses and is ready to start work safely.

RECOMMENDATION 16

Funding to provide sector specific training to enable new entrants and returners to the sector to become "site-ready"

Lead: LEP Activity

5.5 Attracting and retaining new talent to the industry – engaging with schools, colleges and universities building on good practice already identified in the marketplace

Employers involved in this consultation highlighted that the sector suffers from not providing young people with the details of the wide and varied opportunities available in the sector, and in relation to data gathered by the Mansfield Learning Partnership showing that young people look to those who are doing a job for advice, there is a notable mismatch between this and the data gathered in the DNLCC Quarterly Economic Survey (QES). The QES asked "How important over the next year is it to build better links with schools" 37% of respondents from the construction sector said "Not at all" 33% "Slightly" 17% "Very" and only 13% "Critical".

There were general concerns that access to Labour Market Information (LMI) for careers advisors isn't robust and holistic enough, it was thought that young people were not enthused about the sector and did not know about the width and depth of opportunities that construction can offer.

A further discussion was had around whether the types of future career opportunities and new job roles in the region were understood by those providing careers advice e.g. opportunities in the work involved in building the nuclear sector and with regards to emerging low carbon technologies.

As to whether the range of opportunities in the sector are sufficiently promoted in schools, colleges and to the unemployed a majority of respondents thought this was only partially, or not

at all, fit for purpose. Also as to whether the gender stereo-type barrier is being broken down to attract more females into the sector, is also expressed as a concern.

The battle to gain or retain 6th form students restricts schools and colleges from offering the full range of available career paths and opportunities was also highlighted as an issue, and that there is a fallacy that pre-16 students who do not exceed academically will only be suitable to work in construction.

The issue of providing robust careers advice and enthusing young people about the sector addresses only part of the problem, there needs to be a change in the pattern of recruitment of education leavers and young people more generally. When looking at recruitment trends across the UK employers the Construction sector were by far the least likely to have recruited education leavers into their first job (only 18% of establishments) with only 30% of construction employers stating that they had recruited a young person under the age of 25 in the two to three years prior to being surveyed (data taken from the UKCES Employer Skills Survey 2013 Evidence Report 81-January 2014).

Suggestions on who should lead on schools engagement were based around an Education Business Partnership model that uses “sector champions” and to expand the CITB offer. A potential solution is to use the model currently used by STEMNET to provide STEM Ambassadors, this is a model that can be replicated specifically around construction (this already happens in areas such as Civil Engineering through the STEM Ambassador networks and CITB have developed a Bronze and Silver CREST awards in association with the British Science Association) and has proven to be successful.

National organisations such as “Inspiring the Future”, delivered by The Education and Employers Taskforce, were also highlighted as an organisation which has an effective route into schools.

In relation to attracting graduates to the sector there were a mix of organisations who do recruit graduates and some who do not, the latter tended to be the smaller organisations.

The Chartered Institute of Building (CIOB) reported that UCAS figures for enrolments on undergraduate degrees showed a worrying decline of 43% since 2008. University built environment departments faced major restructuring losing large numbers of teaching staff and being subsumed into other departments such as engineering which have a perceived higher value. There is a potential threat to Construction Management as an academic discipline which is a cause for concern.

Suggestions to promote graduate recruitment and retention included:

- Apps and website that can match graduates with employers in the region
- Graduate training programmes linked to the sector
- Making the local area an attractive, safe and exciting place to live with great local infrastructure
- More visible activities and events to support this agenda – site visits, guest lecturers etc.
- Employers with good career development and progression opportunities

This also relates to supporting Leadership and Management with a suggestion to provide a graduate training programme aimed at teaching management skills, along the lines of a young managers club.

Responsibility should however lie with the employers and this relates back to providing an attractive career development pathway.

One area which is generally overlooked in schools is the development of entrepreneurial skills. This should form part of the school and college curriculum and will enhance student's employability skills improving attitude, aptitude and adaptability.

There is a major role for careers advisory services ensure that a robust and holistic view of the sector is fully covered in their remit. Support to ensure that careers advisors are more up to date with understanding the wide variety of opportunities in the sector is required.

RECOMMENDATION 17

Increase interaction between Higher Education Institutes and employers, this element should also form part of leadership and management programmes which aim to support career progression and gives graduates a line of sight to the vast range of career opportunities.

Lead: Construction Ambassador

The regions three universities have between them a range of courses and support which feeds directly into the construction sector with courses which include: Architecture; Building Surveying; Civil Engineering; Construction Project Management; Design and the Built Environment; Construction Management and Property Development.

It is essential that the sector builds on existing relationships with academia and to improve business engagement with those companies who traditionally do not look to the universities for support, this can be through accessing the graduate talent pool or the range of initiatives that can support the development of new skills and products i.e. The Nottingham Trent University Future Factory, University of Nottingham Centre for Structural Engineering and Construction or their range of support delivered at the University Innovation Park.

RECOMMENDATION 18

Commissioning of a prospectus of support which maps areas of activity and support to encourage innovation in the construction sector, this should include the delivery of business engagement events to promote the various areas of innovation support in the area.

Lead: LEP Activity

6. CONCLUSION

Construction already plays a key role in the D2N2 economy. With a policy emphasis on infrastructure, national projects such as HS2 in the pipeline and a continued need for greater numbers of houses, the role for the construction sector remains of critical importance. To realise the opportunities the future will bring it is vital that the sector be properly supported and given the edge on its competitors elsewhere in the UK.

The report makes 18 recommendations to this effect, with the focus on ensuring there are appropriate skills provision, effective communication and linkages, and forward planning and analysis of opportunities to support future development.

No single agency can deliver all that is recommended and at the outset of the paper five different lead groupings to take the initiative on specific recommendations are proposed. This includes the proposed creation of a new construction ambassador role. There is certainly scope to explore these groupings further and it would be anticipated that any work that develops should include an iterative process of ensuring the right vehicles and partnerships are in place for successful delivery.

With thanks:

The consultative group was chaired by Morgan Sindall with support from the Construction Industry Training Board (CITB). Other organisations which provided support, feedback, case studies and their insight are:

A1 Sheet Metal Flues Limited
Aspin Consulting Limited
Atkins Construction
Balfour Beatty
Barbour ABI
Bowler Energy
Bowmer and Kirkland
Brick Tinting Solutions Limited
BSP Consulting
C&G Assessments
CAGE
Chesterfield College
CITB
CITB-National School of Construction
Civil Engineering Contractor Association
Clegg Group
CPMG Architects
David Wilson Homes
Derby City Council
Derby College
Derbyshire County Council
Derbyshire County Council CAYA
Derbyshire Training Network
dkmy Architects Limited
DSA Environment and Design Limited
Efficiency East Midlands

Employer First
Explore Manufacturing
Fairgrove Homes
Faithfull + Gould
Federation of Master Builders
Futures
Futures Housing Group
G F Tomlinson Building Limited
J Tomlinson Limited
Gleeds
Gusto Homes
Home Builders Federation
Hope Construction Materials
Ingeus
Institute of Civil Engineering
Inspire Design and Developments
Keir Group
Laing O-Rourke
Larchwood Construction Marketing Limited
Lovell
Mansfield Learning Partnership
Mansell Construction Services
M-EC
Merebrook Consulting
Mitie Property Services (UK) Limited
Morgan Sindall
Morgan Tucker
Mott Macdonald Limited
North East Derbyshire District Council
Northern School of Plastering and Partitioning
Nottingham Builders
Nottingham City Homes
Nottingham Trent University
Nottingham Trent University Future Factory
Nottingham Construction Network
NT Killingley Limited
PK Group
Principle Contracting Limited
Responsible Solutions
Royal Institute of British Architects
Robert Woodhead Ltd
Scape
University of Derby
University of Nottingham
URS Infrastructure & Environment UK Limited
Waystone Limited
William Saunders
WT Partnership