D2N2 Local Enterprise Partnership

Construction Labour and Skills Research SHORT REPORT

3 May 2016

Contents

Foreword from D2N2 Developing a Strong D2N2 Construction Sector

The D2N2 LEP and Sector & Skills Advisory Group are delighted to launch our Construction Pipeline Report produced for D2N2 by CITB and Whole Life Consultants Ltd.

Visibility of projected pipeline activity is often cited as a barrier for business growth. The construction sector in D2N2 predominantly consists of SMEs and microbusinesses, so it is important to do all we can to reach these business owners and encourage them to grow.

This summary highlights the key messages to be found in the report giving data on the estimated £10.5bn spend in the next five years in the region broken down into sub sets within construction, the labour demand, the skills needed to deliver, matching up what is being supplied by local training providers.

Construction is a priority sector for D2N2 and we have an Advisory Group made up of private sector construction businesses, key support organisations and training providers to support us in growing this sector.

This report forms part of our two Sector and Skills Plans and is a fantastic opportunity for us to bring industry and training providers together to make sure we have the skills to deliver the pipeline in the next five years and beyond.

We hope the findings of this research will give businesses the confidence to look at how they can grow and also raise awareness of the great support available from D2N2.

Through the ESIF (EU funding) we will be able to offer SMEs a resource to develop their business, explore new innovation and technology and to upskill their workforce and take on apprentices. We have in place our D2N2 Employability Framework which is a 'shared language' around employability for employers, young people, schools and advisors. It is a strategic response to address questions of employer demand and skills supply across the D2N2 area – 'Employability needs to be part of the coherent career development and work related programme in schools, delivered in partnership with education, employers and careers professionals'.

Through our Government funded "Local Growth Fund" we have significant capital expenditure planned for D2N2 and our Procurement Charter is our mechanism to get the widest benefits from the investment, in terms of social and environmental impact.

If you would like further information on construction in D2N2 please visit the Growth Hub website. A full version of the report with a full list of pipeline projects can also be found there.

www.d2n2growthhub.co.uk/growing-your-business/441/construction-sector-support

We hope to hear from you in future to look at how we can work together to grow the construction sector further in D2N2.

Peter Richardson
Chair of D2N2 Local Enterprise Partnership

1. CITB introduction

Full report

The full report into construction and labour demand and supply for the D2N2 area is, with appendices, more than 30 pages long. This SHORT REPORT provides a summary of extracts from that report. The full report should be read for a complete picture of the analysis completed, the methodology followed and sources of base data. It provides expanded explanations for each of the sections in this report plus extensive appendices of additional relevant information.

Direction of travel

Overall the sense of the full report is that it broadly endorses the established D2N2 strategy. The evidence that is available tends to indicate that there is no major obvious gap in total skills that requires significant urgent attention. The report supports D2N2's collaborative approach to engaging stakeholders to build understanding and work together to develop the local economy through enhanced skills provision and sector development. D2N2 is already making progress with relevant work including: a procurement charter; a provider charter, European Structural and Investment Fund programmes and apprenticeships.

Objectives

CITB's aim is that information provided in the main report will contribute to the D2N2 LEP area's *evidence base*, allowing D2N2 to: support local decision making; direct development of the curriculum and education and business-provider collaboration.

The D2N2 LEP areas opportunities are to: support growing businesses; develop a more appropriately and better skilled and flexible workforce; drive higher level skills, match skills and the local economy, encourage job creation, and support the delivery of infrastructure that will enable further growth and ensure that the D2N2 area is prepared to exploit opportunities as they emerge.

Call to action

The call to action is for stakeholders interested in opportunities that enhance the local: economy, population's opportunities and advancement of the D2N2 area to engage with one another and the LEP and actively participate in making a contribution to the recommendations in this report and the D2N2 Sector and Skills Plan.

2. Recommendations

1a	Review and develop, as appropriate, the D2N2 skills plan to ensure that the gap between demand and skills provision for high demand or priority professions and trades does not become a problem.
1b	**Pipeline identification, planning and exploitation.** Develop, as far as possible, a more detailed long term picture of construction and infrastructure investments for the D2N2 area; assess their implications and potential skills demands and use this information to inform skills recruitment (1a).
1c	**Reskilling and upskilling.** A holistic skills plan may benefit from identifying cross-sectoral occupational impacts on labour requirements and opportunities.
2	Identify potential partners within the D2N2 area that will have an interest and shared vision for economic growth. Share analysis with them and engage them in contributing to building collaborative holistic plans.
3	Develop the future curriculum. Increase provision of construction skills training (following on from recommendation 2).
4	Build a more positive image of construction and enhance careers guidance through schools. Work with construction contractors to help them enhance the image they project. *The consultation with D2N2 stakeholders on 5 April2016 asserted the long-term importance of changing perceptions among young people about construction careers; about making them attractive to those who have traditionally been under represented in construction: e.g. women, ethnic and other minorities and those disadvantaged and requiring additional support.*
5	Introduce *smart procurement* as a lever to enable skills development and image enhancement, whereby public sector tenders contracts set requirements or rewards for value-add initiatives such as: outreach; image development; encouraging participation from minority groups, re-skilling and upskilling. *This has the potential to influence progress against recommendations: 2, 3, 5 & 6.*
6	**Apprenticeships.** Government has set a commitment to create three million apprenticeships by 2020. The D2N2 area can contribute to this by enabling apprenticeships and the opportunity to incentivise employers and colleges to work together to create a shared apprenticeship scheme.

D2N2 LEP Skills Plan

The recommendations have the potential to make a contribution to the D2N2 LEP's developing Skills Plan's priorities, notably:

- **Priority 1** Develop sector growth agreements to make explicit ownership and shared responsibilities for investment, ICT, labour market intelligence and impact measures.
- **Priority 2** Improve business leadership, management skills and training needs analysis to help increase productivity and performance.
- **Priority 3** Promote and develop apprenticeships and traineeships to achieve higher level skills and improve social mobility.
- **Priority 5** Raise the visibility of and access to career insights and specialist careers support for young people and adults to raise aspirations, participation, retention and achievement in learning and work.

3. Methodology & data sources

The known pipeline of anticipated construction projects is drawn from a database of submitted planning applications provided by *Glenigan*. This pipeline lists active planning applications, which we use to show for the period up to 2020.

Unallocated projects

The Glenigan database does not typically include projects valued at less than £250,000 and those not requiring planning consent (including repair and maintenance). For consistency, projects with incomplete data or other anomalies are removed. To address this, Whole Life Consultants with CITB have developed a balancing scenario to estimate *undefined work* to provide a fuller picture of potential total demand.

Labour demand has been calculated from the spend in each project type for the known pipeline over the next five years.

East Midlands ONS data

The picture of supply and gap analysis uses data published by the Construction Skills Network that utilises Office for National Statistics (ONS) data available for the East Midlands region. The D2N2 area accounts for 48% of construction employment of the East Midlands region. So predictions are based on an extrapolation of 48% of that regional data.

Clarification of data sources used by CITB and in other D2N2 reports

Figures in the D2N2 State of the Economy Report appear to differ from the pipeline analysis data in this report. With estimates of 40,000 employed in construction indicated in the D2N2 report compared with 79,400 stated below.

- This report includes figures available for all in employment in the industry (employees and self-employed), whereas recent D2N2 reports include employees only.
- An analysis of NOMIS data (Office for National Statistics) suggests there are nearly 26,000 self-employed construction workers in the D2N2 area. In addition, this report also includes professional roles in construction that are unlikely to be included in other measures and accounts for approximately 5,000 of the apparent disparity.

4. Demand

The known pipeline

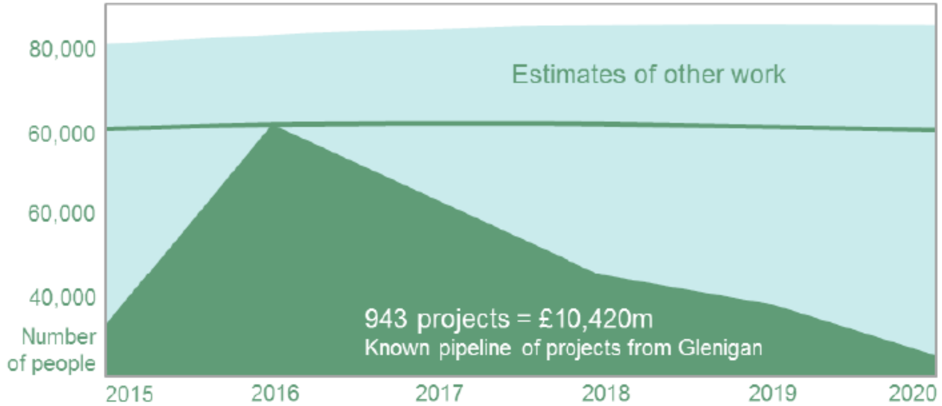
- 943 projects with a total estimated value of £10,420 million.
- Of these, 180 projects (or 19% of the total number) are estimated to be worth £8,650 million (83% of the total known pipeline's value.

This highlights the significance of the largest projects in influencing demand.

PIPELINE [2016 – 2020] Planning applications	Total projects	Significant projects	%
Number	943	180	19%
Total construction spend	£10,420m	£8,650m	83%

As the certainty and completeness of planning application data declines the further forward we look, the most accurate picture of demand is established from data available for 2016 (the peak demand). For 2016 the known pipeline is estimated to be worth £2,941.7million.

The chart below shows: known construction labour demand [in green]. The green line illustrates anticipated mean labour demand from hypothetical iterative data collection. The pale blue area shows estimated total construction labour demand including, repair & maintenance and projects not in Glenigan pipeline data.



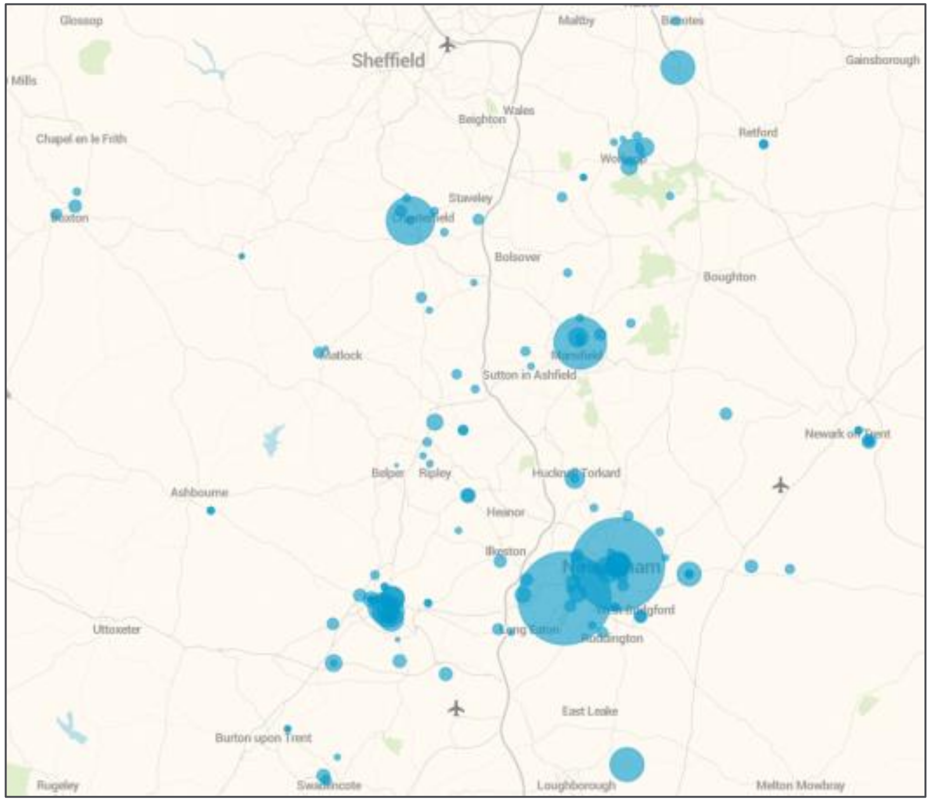
Known construction spend by sector for 2016	2016	2016 % of total
New Housing	£813.8m	27.7%
Private Commercial	£791.8m	26.9%
Infrastructure	£513.7m	17.5%
Public Non-residential	£396.3m	13.5%
Private Industrial	£198.1m	6.7%
Non-housing R&M	£144.8m	4.9%
Housing R&M	£83.1m	2.8%
Total	**£2,941.7m**	

Known labour demand by sector	2016	2017	2018	2019	2020
New Housing	25,619	13,385	2,955	1,100	455
Private Commercial	16,521	10,168	8,339	4,961	690
Infrastructure	4,005	9,113	8,956	8,644	2,690
Public Non-residential	7,625	4,161	406	0	0
Private Industrial	1,202	382	68	0	0
Non-housing R&M	3,666	1,458	47	0	0
Housing R&M	1,000	2,079	1,754	657	102
Total	**59,638**	**40,745**	**22,524**	**15,362**	**3,936**

The period after 2016 represents *an artificial drop off* that will be filled with new planning applications.

Demand (continued)

Significant projects mapped by location and scale indicate (as would have been expected) a concentration of activity in the centres of population.



Also accounted for is the D2N2 Growth Deal funding (some £192m) that will deliver significant capital investment in the area.

5. Supply

Construction workers

The construction workforce for the East Midlands is estimated to be 164,000. D2N2 represents 48% of the East Midlands working population so the D2N2 construction workforce is assumed to be around 79,400.

- Construction makes up 7% of the total employment of the region.
- 74% of those working in construction in the East Midlands live in the East Midlands.
- The average journey to work is 23 miles.
- 38% have 20+ years' experience.
- 64% have 10+ years' experience.

There are estimated to be 8,600 construction firms in the D2N2 area:

- The vast majority – 92.9% – employ fewer than10 people [described as *micro*].
- 0.1% of companies employ more than 250 people.
- Leaving 7% employing between 10 and 249 [SME].

Learning aims

There are 61 providers of construction training for the D2N2 area (not all based in the area). They deliver approximately 11,235 Construction & building services learning aims annually (approximately 7% of the total). Four colleges deliver over 60% of all that training.

- Chesterfield College
- Derby College
- New College Nottingham
- West Nottinghamshire College

6. Skills gaps & priority occupations

Establishing a precise numerical assessment of the demand, supply and potential gap for each occupation is disproportionately difficult in relation to the potential value, as pipeline projects change, workers join and leave the pool of employment and move in and out of the D2N2 area.

Although any potential gap appears unlikely to have a significant impact the potential exists to align better future curriculum planning with industry demand.

One mechanism for doing this is to prioritise occupations based on demand and potential gaps.

Where one looks significant and can be influenced this may be worthy of further examination. Where both factors appear significant these occupations are definitely worthy of local discussion and action planning.

Labour demand by occupation for known pipeline 2016	
7,500	Non-construction professionals
5,700	Wood trades and interior fit-out
4,000	Plumbing, heating, ventilation, air conditioning
3,800	Other construction process managers
3,750	Other construction professional & technical
3,700	Labourers nec*
3,550	Electrical trades & installation
3,500	Senior, executive & business process managers
2,650	Building envelope specialists
2,200	Painters and decorators
1,750	Bricklayers
1,700	Non–construction operatives
1,650	Civil engineers
1,650	Surveyors
1,450	Specialist building operatives (nec*)
1,300	Roofers
1,300	Plasterers and dry Liners
1,100	Construction Trades Supervisors
1,050	Plant operatives
900	Construction Project Managers
850	Architects
800	Glaziers
750	Steel erectors/structural
750	Plant mechanics/fitters
650	Civil engineering operatives (nec)
600	Logistics
550	Scaffolders
500	Floorers

Relative gap by occupation – average demand for 2016 compared with known 2015 supply	
Architects	290%
Scaffolders	259%
Roofers	145%
Non–construction operatives	137%
Construction Trades Supervisors	135%
Labourers nec*	109%
Logistics	103%
Steel erectors/structural	94%
Bricklayers	92%
Plumbing, heating, ventilation, air conditioning	86%
Civil engineers	85%
Other construction professional & technical	83%
Construction Project Managers	82%
Wood trades and interior fit-out	78%
Non-construction professionals	75%
Surveyors	74%
Painters and decorators	72%
Building envelope specialists	68%
Plant operatives	67%
Civil engineering operatives (nec)	67%
Senior, executive & business process managers	63%
Floorers	62%
Glaziers	61%
Plasterers and dry Liners	59%
Other construction process managers	55%
Electrical trades & installation	55%
Specialist building operatives (nec*)	49%
Plant mechanics/fitters	43%

Occupations to consider developing an enhanced curriculum for may include:

- Plumbing trades
- Labourers
- Bricklayers
- Roofers

For which there appear to be relatively high demand and a potential skills gap.

7. The Apprenticeship levy

The Government's Apprenticeship Levy comes into effect from April 2017. It will be payable by employers with an annual payroll (PAYE) greater than £3million, where the levy of 0.5% on all sums above this amount. In England the levy will be used to pay for Apprenticeship training provider costs.

For the construction Industry this means that employers with a payroll over £3m will be required to contribute to two training levies. CITB estimates this could impact around 700 employers and generate around £35m of Apprenticeship levy. The Government and CITB are aware that for some employers this is undesirable and have agreed that CITB will work with the construction industry to develop a CITB levy system that is supported by the majority of the industry, allows both levies to co-exist and allows CITB to continue supporting employers to train their workforce; both in apprenticeships and beyond.

What this Levy system will look like is not yet agreed but one possible outcome is for a reduction in the levy paid to CITB. This, along with the future use of Levy funds will form discussions with employers and their representatives during 2016, with resulting changes being included in the next Levy Order that will be placed before Parliament in 2018.

In the meantime CITB will also be working with industry to determine what, if anything, it can do to support employers that will face both the CITB Levy and the new Apprenticeship Levy for the period April 2017 – April 2018.

The guidance published by the Government provides a good starting point to find out more.

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