A closer look at Construction in Greater London

Introduction

This paper reviews project data and provides insights for employers and key stakeholders who are involved in planning for workforce provision on major initiatives throughout London.

Project mapping and tables allow us to pinpoint major current and planned construction projects set in the context of forecast labour demand for London, supply and capacity of training.

As part of the continuing work of the Construction Skills Network (CSN), which produces detailed Labour Market Intelligence at the regional level, there is a need for more effective intelligence at a sub-regional level. The research behind this paper is a key step in this direction and provides a model that we can transfer and apply to any locality.

The latest CSN forecasts predict an average annual growth in construction output of 4.5%, for Greater London between 2007 and 2011. This is higher than any other UK region. This masks some periods of high construction intensity in specific sectors. Growth in new work, for example, is expected to rise by 6.6% per year, whilst repair and maintenance is expected to increase by around 1.5%. The growth for new work will be driven by major construction projects including continuing work at Heathrow Terminal 2, East London and Docklands line extensions, Victoria underground station expansion, Kings Cross mixed use redevelopment and, of course, the Olympics.

In order to achieve and sustain this level of growth in the London economy the Industry needs to recruit from 2007-2011 an average of 12,880 workers per year. This equates to a rise in construction employment of 13.5% over the same period. This paper helps to inform where, when and how the impact of this growth will be felt most.

Projects in Greater London – a general overview

CITB-ConstructionSkills subscribes to a database listing of major[1] construction projects. This is enhanced from data and information provided by our twelve regional Observatories across the UK. The resulting CSN project database is updated quarterly. It contains details of the large majority of current and planned construction projects across the UK. Table 1 below presents a summary of projects by size in Greater London for both current and planned work.

Table 1: Summary of Greater London Projects by Value Band

Size/£M	Under Construction		Planned Construction (2007-2016)		Total	
	Number	Value/£M	Number	Value/£M	Number	Value/£M
0-2	883	818	1,837	1,558	2,720	2,376
>2-10	684	3,016	849	3,942	1,533	6,958
>10-50	256	6,053	314	7,173	570	13,225
>50-100	42	2,994	72	5,775	114	8,769
>100	32	11,474	123	76,466	155	87,939
Total	**1,897**	**24,354**	**3,195**	**94,913**	**5,092**	**119,267**

£24 billion of known work is currently under construction in London. £95 billion is planned to start between 2007-2016.

Figure 1 shows the profile of this work by size band and the difference in overall size profile when current and future workload are compared.

Figure 1: Proportions of work by Value Band
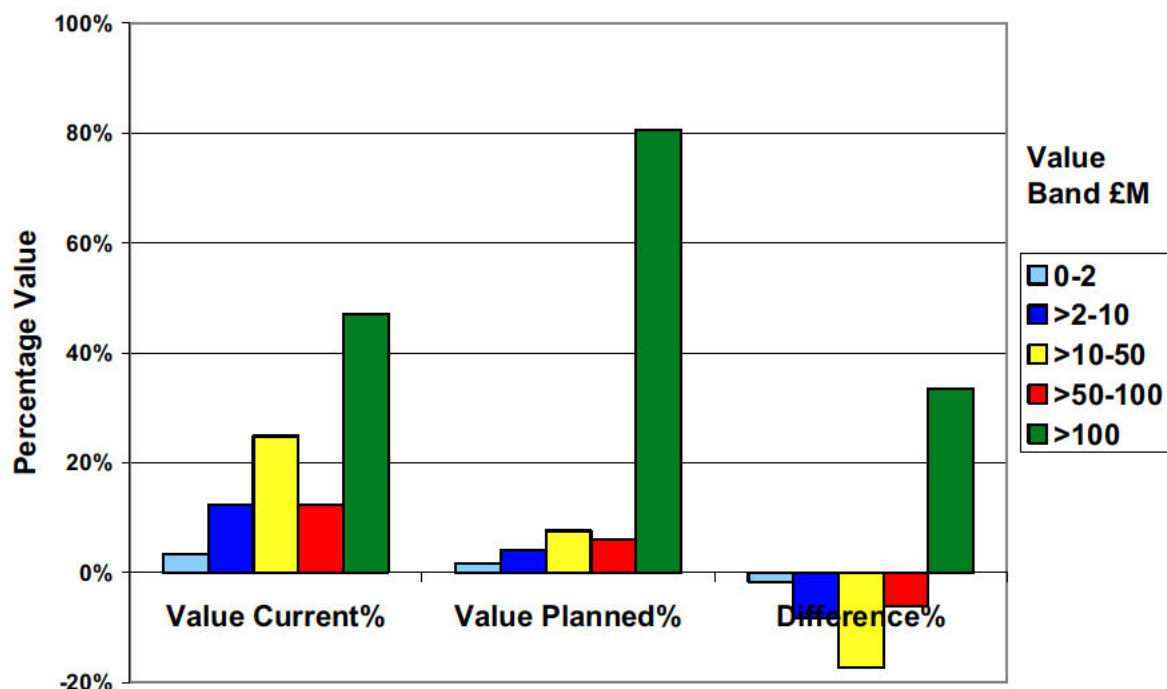
The striking feature is the higher proportion of large projects with a value of over £100 million within the future portfolio. This is partly explained by the fact that a large number of London's smaller

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[1] Major construction projects are defined as Residential 10 units plus or Non Residential with a main contract value of £250,000 plus.

projects are not yet known about or planned. However, at £76 billion, the known future projects with a value of over £100 million provide excellent workforce planning opportunities.

Future London projects in more detail

Figure 2 illustrates the location of known planned projects over £100million. ConstructionSkills has data and information on project name, type, anticipated start date, durations and contacts for each of the projects shown. A separate figure that shows the location of current projects is presented in Appendix A.

Figure 2: Large Planned Construction Projects by Size Band
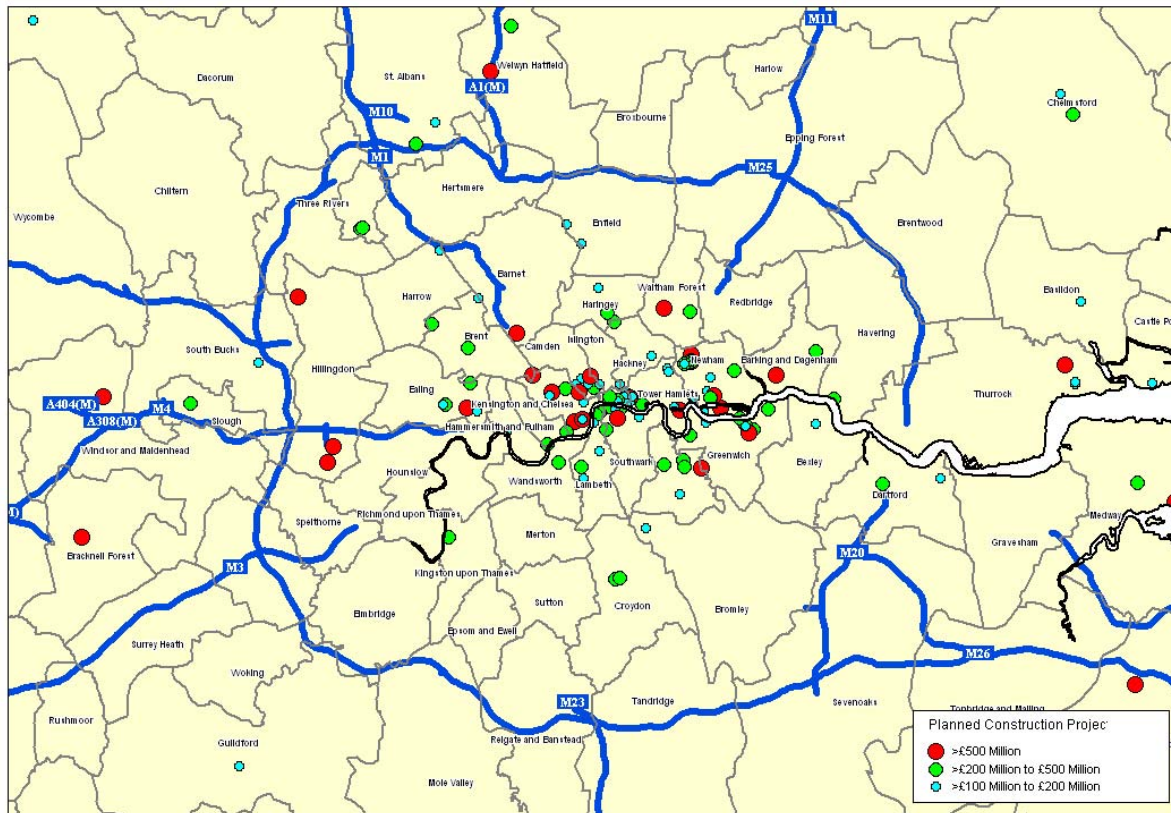
The most high value future projects are located in the Inner London Boroughs. There are also some very large projects in West London, including future Heathrow airport redevelopment projects beyond T5. The scheduling and phasing of these large projects, provides valuable planning information. Table 2 provides a breakdown of projects with values £>500 million – the largest undertakings in London, a majority of which will have construction periods that coincide with the Olympics sites.

Table 2: Scheduling of Projects >£500 Million

Start Year	Finish Year	Type	Borough	Value £M
2003 Ongoing	2008	Shopping Centre	Hammersmith and Fulham	575
2005 Ongoing	2011	Office/Leisure/Sport/Retail/Flats	Wandsworth	600
2006 Ongoing	2009	Urban Development	Hackney	1000
	2010	Housing Framework Contract	Newham	600
	2011	Hospitals	Tower Hamlets	1000
	2014	Urban Redevelopment	Southwark	1500
2007	2009	Town Centre Regeneration	Newham	1800
	2011	3 Office Blocks	City of London	700
	2012	Academies/Schools Framework	Waltham Forest	2000
	2015	Airport	Hillingdon	4000
		1,500 Homes & Commercial	Tower Hamlets	2000
		2900 Houses & Flats	Brent	1000
		Residential & Commercial	Southwark	1000
	2016	Commercial/Residential/Leisure	Camden	1500
		Housing Estate Regeneration	Greenwich	550
2008	2012	London Olympics 2012 (Master)	Newham	2300
	2013	Commercial & Residential	City of Westminster	2000
		Apartments & Commercial		1000
	2014	Residential & Commercial	Newham	3000
	2015	Railway Line/Stations (Upgrading)	Southwark	3500
2009	2010	Commercial & Residential	Barnet	4000
	2011	Motorway Widening (M25)	Hillingdon	5000
	2012	Airport Terminal Building	Hillingdon	1500
2016	2023	Crossrail	City of Westminster	5000
Unknown but planned	Unknown but planned	Commercial/Educational/Residential	Newham	3500
		Commercial/Residential/Leisure		1000
		Airport Redevelopment	Hillingdon	4000
		Urban Regeneration	Barking and Dagenham	1500
		559 Commercial/Residential	City of Westminster	700
		Tramway	Ealing	650
		Houses & Flats	Greenwich	570

The data shows that although the Olympics has been much publicised in the Press there are other and larger projects within Greater London. Appendix B contains the details of the top 50 known current and future projects in the CSN database, ranked by size.

Spatial planning and project intensity

In order to plan at a more strategic level it is useful to see how construction work is distributed spatially around London. Figure 3 illustrates data for future projects by London Borough. The current picture is provided in Appendix C.

Figure 3: Planned Projects Value £M by London Borough
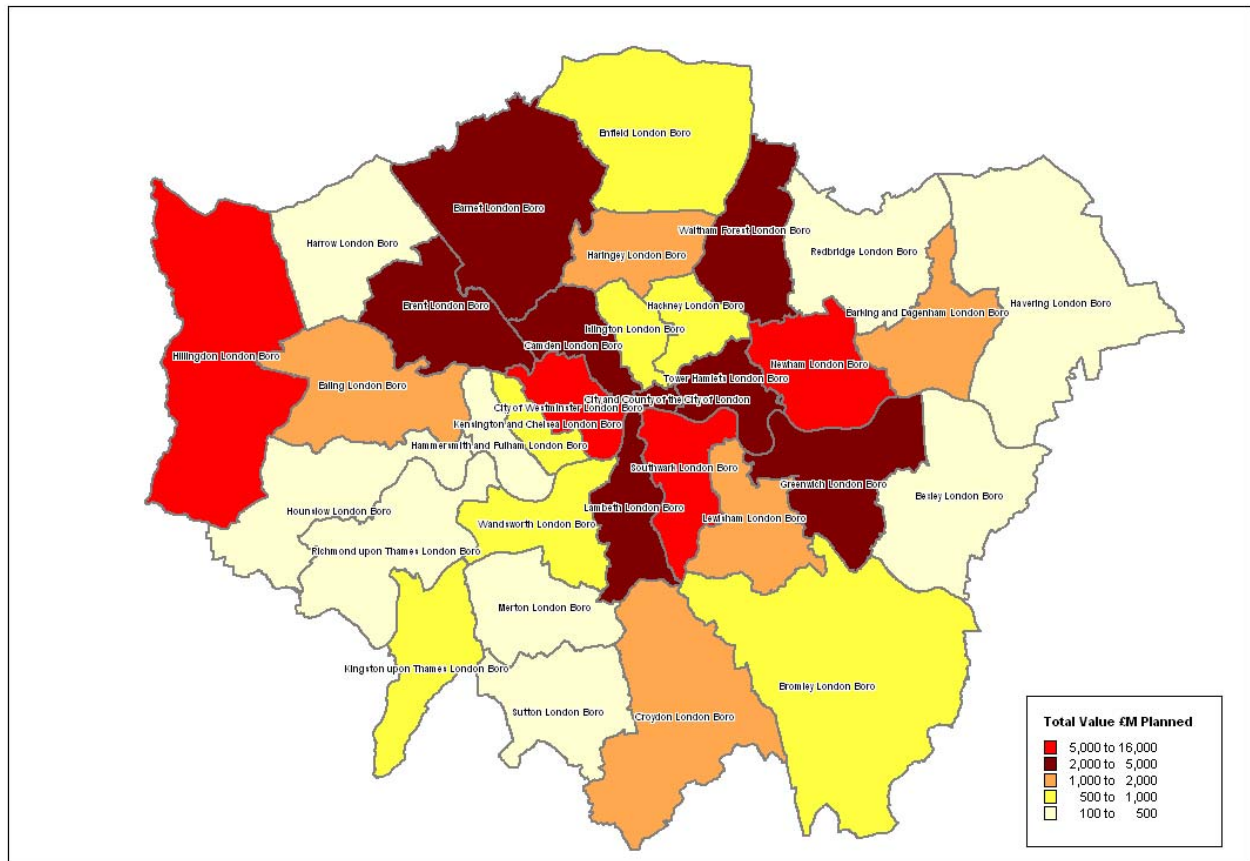
This map provides an interesting picture of future London Construction activity. The Olympic redevelopment Boroughs – Newham, Tower Hamlets and Southwark can clearly be picked out as areas of high intensity. However, Hillingdon (containing Heathrow), Brent, Barnet, Southwark and Lambeth are all areas where considerable activity is planned but rarely come under the same attention as the Olympic or Gateway Boroughs.

The Central London Boroughs – including City of London, City of Westminster and Camden are, as might be expected, also areas of significant investment and future intensity. There is, however, much less planned work in the South and South-West of London.

Workload shifts between London Boroughs

The picture of shifting workload can be clearly seen by comparing the ratio of planned to current workload in each Borough.

Figure 4: Ratio of Planned:Current Projects Value £M by London Borough
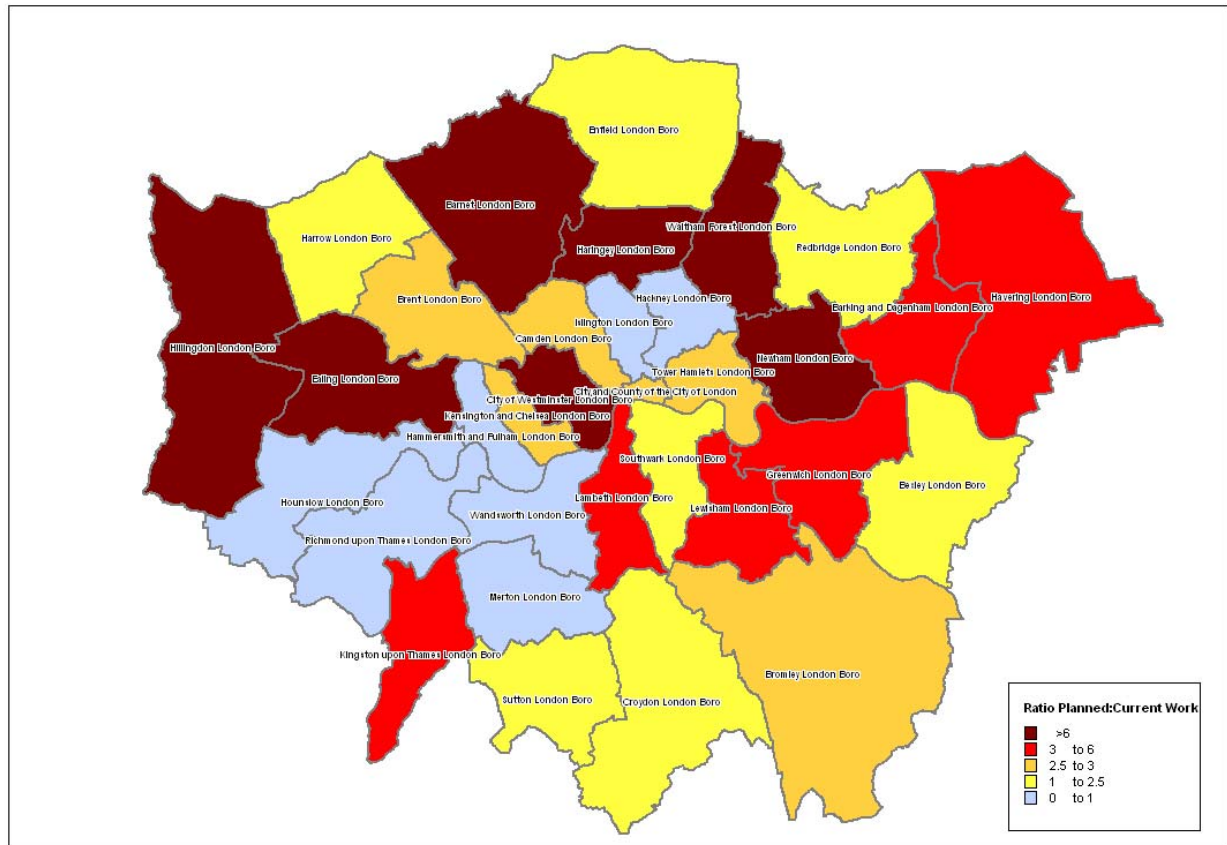
Areas in blue are Boroughs where there is less planned work than is taking place currently. Dark red areas are those where there is more than 6 times the value of known planned work in comparison to work already under construction.

This map clearly shows that whilst the North and Central London Boroughs will experience increased intensity, other areas to the South-West and indeed Islington and Hackney are forecast for less investment than is currently taking place.

Perhaps most significant of all is the increased intensity of work planned for the five Olympic Boroughs and their neighbouring Gateway areas.

Labour Requirements to fulfil project demand in London

The Construction Skills Network provides LMI for Greater London that takes all forecasted workload into account. This includes Repair and Maintenance, which does not appear in the project data shown here. Figure 5 illustrates the proportion of project work by general type for current and future projects and compares the difference. The types of work shown are those used in the CSN model for predicting overall labour requirements for the UK and each region.

Figure 5: Proportion of Value by Broad Industry Type
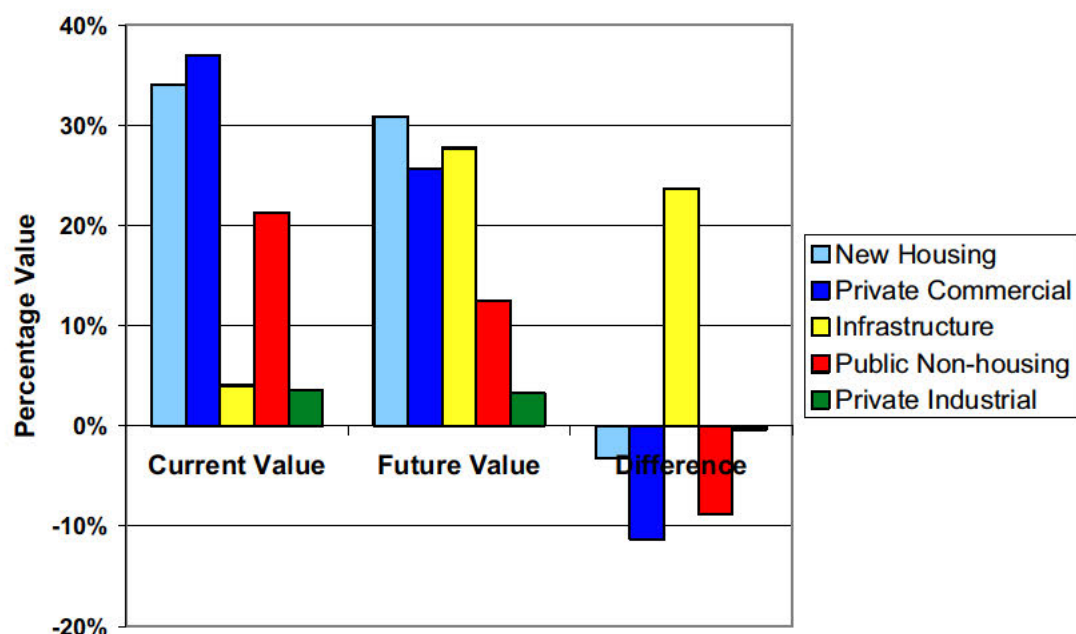
The chart shows that work under construction consists mainly of New housing, Private Commercial and Public-Non Housing, with a small proportion of value accounted for by Infrastructure and Private Industrial. The value of planned work, however, includes a much higher proportion of Infrastructure – an increase of almost 25%, with decreases in the proportions of other types. This supports the CSN forecast of double digit growth for Infrastructure[2]

Due to the nature of project data and incomplete knowledge of planned projects (as discussed earlier) it is difficult to make predictions on future Industry labour requirements using project data alone. This is the strength of the CSN Forecasting Model. This uses the project data shown above and combines this with macro economic data and forecasts to predict future labour needs. It does this in the context of London's existing stock of construction labour and employment patterns.

The CSN model forecasts that Greater London needs to recruit an average of 12,880 workers per year to satisfy the project demand shown here and the wider base load of construction, which includes Repair and Maintenance and other investment.

This is a recruitment need and not a training need but it is possible to assess levels of training within Greater London to help determine where 'pinch points' may occur because of a relative lack of training in certain occupations. Table 3 compares the CSN forecast employment requirements against trainee data. Green rows indicate occupations where number of trainees in the system exceeds overall demand for labour. Red rows indicate areas of relative weakness when training numbers are compared to the average annual requirement for London.

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[2] CSN forecasts 11% growth in Infrastructure each year to 2011 (Blueprint for UK Construction Skills 2007-2011).

Table 3 Number Actual Trainees in London, CSN Average Annual Requirement, Difference between requirement and those in training

Occupation	Supply (Actual Trainees in system 2005-2006)	Demand (Average Annual Requirement)	Difference
Technical	287	<50	+282
Wood Trades	1056	800	+256
Bricklayers	515	220	+295
Plasterers	267	180	+87
Floorers	24	<50	+19
Other CE Operatives	239	230	+9
General Operatives	6	<50	+1
Maintenance Workers	9	<50	+4
Painters	380	390	-10
Plant Operatives	0	50	-50
Plant Mechanics	0	120	-120
Steel Erectors/Structural	0	140	-140
Scaffolders	0	150	-150
Roofers	37	320	-283
Glaziers	9	270	-261
Specialist Buildnig Operatives	63	620	-557
Total	**2892**	**3510**	**-618**

Table 3 provides a general overview of the situation and masks a complex picture, as it does not show the type of training being undertaken by the cohort in each occupation group. However, it does show the number of trainees in the system when compared to the CSN model's average annual requirement and whether they are over or under represented in relation to overall demand.

Areas of greatest and apparent shortfall in comparison to demand include Specialist Building Operatives, Glaziers and Roofers. Occupations including Technical, Wood Trades and Bricklayers enjoyed a considerable surplus of trainees relative to demand. However, it must be stressed that not all of these trainees are ready to take up a full place in the industry as some will be on Construction Awards or full time NVQs and lack the necessary work experience.

Occupations for which London has little or no training provision include Plant Operatives / Mechanics, Steel Erectors / Structural and Scaffolders. There is some but very limited provision for Glaziers. When looking at this data it is obviously important to consider the national skills picture and in particular the mobility of workers[3]. ConstructionSkills produces a number of key surveys, including the Training Numbers Survey, Construction Apprenticeship Survey and others, which are available from the Construction Skills Network website (www.constructionskills.net/csn) and can be read in conjunction with this shorter paper.

Data from the training numbers survey (not shown in the table) also shows where training courses are generally oversubscribed. Whilst there is a particularly severe shortage of trainees for Specialist Building Operatives in London, our data show a high level of course oversubscription. This indicates scope for increasing the number of courses offering this type of provision within Greater London.

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[3] Workforce Mobility and Skills in the UK Construction Sector 2006/2007.

Summary

The data paints a picture of intensity and growth for the Construction Industry within Greater London. There are almost 3,200 known projects worth an estimated £95 billion planned for the region. Comparing planned to current workload shows much of the growth in value may be explained by the increase in the number of very large, high value projects.

Analysing data by London Borough shows wide variation in the level of investment within Greater London. Central Boroughs, Olympic areas to the East and Hillingdon to the West all show very high levels of future intensity. Data for areas to the South-West, Islington and Hackney, however, indicates less planned investment than is currently taking place.

Looking at planned projects by type, the data indicates significant growth in the proportion of value for Infrastructure. This analysis agrees with the CSN forecast, however, this data provides another level of focus with tables and maps pinpointing exact project locations with estimated start dates.

Analysis of training provision within Greater London indicates that there are areas of relative shortfall when the numbers in training are compared with the corresponding annual requirement. Some occupations and professions appear to be relatively well catered for. However, there is little or no training provision for Plant Operatives / Mechanics, Steel Erectors/Structural and Scaffolders.