

6. Route-wide impacts: Regeneration and Economic Development benefits

6.1 Introduction

6.1.1 This section examines the employment impacts of the scheme on regeneration areas. These impacts arise from improved accessibility to employment opportunities for those living in areas served by Crossrail, the attraction of new commercial and residential developments to locations served by Crossrail and increased leisure and tourist visits to Crossrail served areas which have seen improvements in accessibility.

6.1.2 The section details the:

- accessibility changes as a result of Crossrail;
- volume of development attracted to regeneration areas as a result of Crossrail;
- consequential impacts on employment.

6.1.3 It is assumed that the impacts set out in this section will arise by 2021.

6.2 Accessibility changes

6.2.1 Crossrail will significantly improve the public transport accessibility of the areas it serves and create a range of new direct journey opportunities and improve accessibility across parts of the south east and London, particularly from southeast London and Kent by the provision of a new rail crossing of the River Thames between Custom House and Abbey Wood.

6.2.2 Examples of 'before' and 'after' Crossrail travel times for a range of journeys are shown in *Table 6.1*.

TABLE 6.1 ILLUSTRATIVE JOURNEY TIMES AND TIME SAVINGS WITH CROSSRAIL (IN MINUTES)

	Before Crossrail	After Crossrail	Saving
Abbey Wood to Isle of Dogs	30	9	21
Isle of Dogs to Paddington	29	18	11
Stratford to Heathrow	65	49	16
Ealing Broadway to Farringdon	25	17	8
Hayes to Tottenham Court Road	34	24	10
Southall to Custom House	58	36	22
Paddington to Liverpool Street	17	11	6

Source: CLRLL based on TfL Railplan model

- 6.2.3 From an economic and regeneration perspective these time savings can be also be measured in terms of the number of additional jobs that become available within particular key isochrones and the number of additional potential employees who can now access jobs within station catchment areas to serve new developments attracted there.
- 6.2.4 Two measures have been used. The first is to assess the additional number of jobs that become available within 30 minutes travel time from regeneration areas. This reflects typical travel patterns for socially excluded groups and the unemployed. The second is the increase in the potential workforce within 45 minutes travel time of prospective development sites. This represents average travel to work times in London.
- 6.2.5 In absolute numbers, *figure 6.1*, the biggest increase in access to both jobs and potential workers is in the east, with the areas between Whitechapel to Abbey Wood and Manor Park seeing the largest benefits.

FIGURE 6.1: ABSOLUTE INCREASE IN EMPLOYMENT OPPORTUNITIES WITHIN 30 AND 45 MINUTES

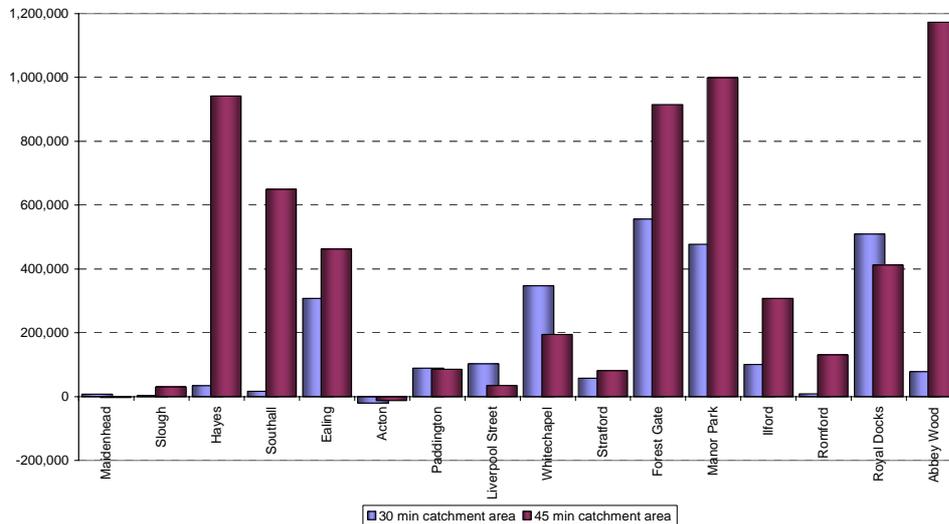
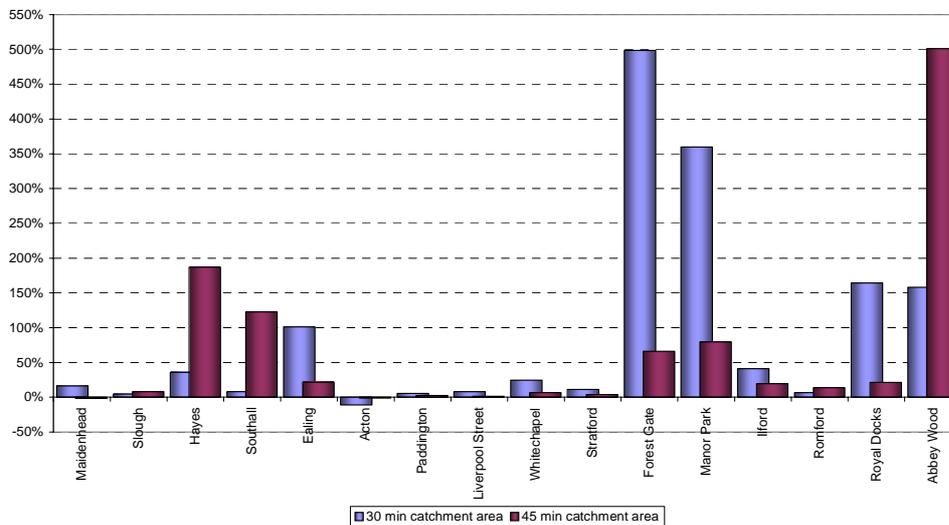


FIGURE 6.2: PERCENTAGE INCREASE IN EMPLOYMENT OPPORTUNITIES WITHIN 30 AND 45 MINUTES



6.2.6 Whilst in percentage terms the benefits are greatest again in the east, they are still significant even further out from central London, *figure 6.2*.

6.2.7 Besides improved access to employment Crossrail will also improve access to a wide range of other services and facilities. National policy objectives (eg, OPDM Social Exclusion Unit *Making the Connections: Final Report on Transport and Social*

Exclusion 2003), to promote social inclusion through transport planning seek to improve accessibility for those in disadvantaged groups and areas to those opportunities that are likely to have the most impact on life chances, including employment, education, health and retail facilities.

- 6.2.8 Crossrail will assist in achieving this objective by both increasing accessibility generally and especially for the mobility impaired. Therefore the assessment of accessibility included consideration of the impact of Crossrail on accessibility to further education, regional hospitals and major centres.
- 6.2.9 TfL's transport model CAPITAL was used to model accessibility changes with and without Crossrail. Data from the 2001 census were used to capture the demographic and socio-economic characteristics of the population within these isochrones. This analysis was applied to changes in accessibility to universities, hospitals and major centres along the route.

Access to education

- 6.2.10 *Table 6.2* below summarises universities that are located within walking distance of Crossrail stations, and the functions based at those sites.

TABLE 6.2: UNIVERSITIES SERVED BY CROSSRAIL

Universities	Function	Location	Nearest Crossrail Station
University College London	Various undergraduate and postgraduate courses, including engineering, clinical/medical science, and neurology. Various research centres including human genetics, neuroscience and transport.	Bloomsbury	Tottenham Court Road
Queen Mary College, University of London	Queen Mary's School of Medicine and Dentistry. Hall of residence, lecture theatres and several research departments of the School.	Charterhouse Square, Farringdon	Farringdon
Queen Mary College, University of London	Queen Mary's School of Medicine and Dentistry. Teaching campus. Extensive medical and dental library	Next to the Royal London Hospital, Whitechapel	Whitechapel
Queen Mary College, University of London	Queen Mary's School of Medicine and Dentistry. Teaching campus.	Within St Bartholomew's Hospital.	Farringdon
London Metropolitan University	Various undergraduate and postgraduate courses, including accountancy, economics, humanities, social science, art/media and management courses.	Moorgate & Aldgate East	Liverpool Street/Whitechapel
City University	Postgraduate and undergraduate courses in radiography. Postgraduate and undergraduate courses in nursing & midwifery	Department of Radiography (Charterhouse Square), St Bartholomew's School of Nursing & Midwifery, St Bartholomew's West Smithfield.	Farringdon
City University	Links to Queen Mary College as above.	St Bartholomew's School of Nursing & Midwifery, Royal London Hospital	Whitechapel
Thames Valley University	Various undergraduate and postgraduate courses, including music & media, law, business, nursing and tourism	Ealing	Ealing Broadway
Thames Valley University	Various undergraduate and postgraduate courses, including nursing, business management, music & media, and computing.	Slough	Slough
Guildhall School of Music & Drama	Undergraduate and postgraduate courses in music and drama programmes.	Barbican	Farringdon
University of Westminster	Various undergraduate and postgraduate courses, including biosciences, computer science, health, social science and law.	Cavendish and Regent Campuses, Regent Street and New Cavendish Street	Bond Street

6.2.11 The introduction of Crossrail increases the number of young people who live within 30 and 60 minutes of these establishments as shown in *table 6.3*. Overall, there will be a 10% increase in the number of 18 to 24 year olds living within 30 minutes of these universities and a 6% increase in the living within 60 minutes of the universities. Given the increasing number of students who live with their parents while at university this improved accessibility will assist them accessing higher education facilities.

TABLE 6.3: PERCENTAGE INCREASE IN THE NUMBER OF 18-24 YEARS OLD LIVING WITHIN 30 AND 60 MINUTES OF UNIVERSITIES SERVED BY CROSSRAIL.

	Number of 18-24 year olds within 30 min of University	Number of 18-24 year olds within 60 min of University
University	% change on Base	% change on Base
Queen Mary St Barts	18%	8%
Queen Mary St Barts City University – Farringdon	18%	8%
Queen Mary	17%	8%
Thames Valley University Slough	17%	-16%
Royal London	10%	5%
Royal London City University – Whitechapel	10%	5%
Metropolitan University	9%	4%
Guildhall Barbican	8%	5%
Thames Valley University Ealing	5%	19%
Westminster University	2%	4%
University College London	0%	3%

6.2.12 The reduced catchment for the Thames Valley University Slough campus, is due to the replacement of some limited or non-stop Great Western services to Paddington with all stopping Crossrail services

Access to health facilities

6.2.13 Regional hospitals along the Crossrail route and the main services they provide are set out in *table 6.4*.

TABLE 6.4: REGIONAL HOSPITALS SERVED BY CROSSRAIL STATIONS

Regional Hospital	Function	Location	Nearest Crossrail Station
Royal London Hospital	<p>Together the RLH and St Bartholomew's provide:</p> <ul style="list-style-type: none"> • District general hospital (DGH) for Tower Hamlets and the City, providing secondary level services to our local population. • Tertiary centre for north east London, providing complex specialist services for the sector and beyond, notably Essex. • Provider of innovative and leading-edge clinical services to London and the UK. <p>RLH departments include the Helicopter Emergency Centre. Coronary Care Unit Dental Hospital, neurology, and orthopaedics.</p> <p>Proposals for new hospital include London's leading trauma and emergency care centre, Europe's largest renal service and the capital's second biggest paediatric service, provided within a dedicated Women and Children's Unit.</p>	Whitechapel	Whitechapel
St Bartholomew's Hospital	<p>As above.</p> <p>St Bartholomew's departments include a breast cancer unit, cardiology, ear nose & throat, and endocrinology.</p> <p>Planning permission to redevelop the hospital, to include a Cancer and Cardiac Centre of Excellence.</p>	Farringdon	Farringdon
Ealing Hospital	A district general hospital providing acute services for patients in the West London area.	Ealing Broadway	
Goodmayes Hospital	Mental health.	Goodmayes	Goodmayes
Old Church Hospital	<p>Serving Barking, Havering and Redbridge, departments include A&E, dermatology, ENT, neurology, and paediatrics.</p> <p>The Cancer Centre at Barts and The London together with Oldchurch Hospital form the East London Regional Cancer Centre.</p>	Romford	Romford
Harold Wood Hospital	Serving Barking, Havering and Redbridge, departments include dermatology, ENT, neurology, and paediatrics. May be closing as part of plans to expand Oldchurch hospital.	Harold Wood	Harold Wood
St Mary's Hospital	<p>St Mary's provides a wide range of specialist and acute services to people including bone marrow transplant, cancer treatment, cardiology, neurology, orthopaedics, renal and transplant unit, and HIV.</p> <p>Proposals for a Paddington Health Campus (PHC) will create a world class clinical, research and teaching centre for north west London. It will bring together on one site the teaching hospital, St Mary's NHS Trust, with the Royal Brompton & Harefield NHS Trust and the medical faculty of Imperial College London including the National Heart and Lung Institute.</p>	Paddington	Paddington

6.2.14 The introduction of Crossrail increases the number of households who live within 30 and 60 minutes of the establishments by an average of 9% and 7% respectively. Increases to individual hospitals are shown in *table 6.5*. This improved accessibility benefits patients, their friends and relatives as well as potential employees. There is no material difference in accessibility for those with or without a car.

TABLE 6.5: PERCENTAGE INCREASE IN THE NUMBER OF HOUSEHOLDS LIVING WITHIN 30 AND 60 MINUTES OF REGIONAL HOSPITALS SERVED BY CROSSRAIL

	Number of households within 30 min	Number of households without a car within 30 min	Number of households within 60 min	Number of households without a car within 60 min
Regional Hospital	% change on Base	% change on Base	% change on Base	% change on Base
Queen Mary St Barts	21%	19%	8%	6%
Oldchurch Romford	8%	11%	1%	0%
Harold Wood	10%	10%	4%	6%
Goodmayes	9%	9%	10%	12%
Royal London	11%	9%	5%	3%
Paddington	1%	2%	5%	4%
Ealing	0%	0%	12%	17%

Access to major centres

6.2.15 There are a number of metropolitan and regional centres (as defined by the London Plan) served by Crossrail. These include Romford, Ilford, Ealing, Southall, and Stratford while outside London major centres served include Slough, Brentwood and Maidenhead.

6.2.16 Crossrail brings about an 11% increase in the number of households without access to a car within the 30 minute isochrone of the centres listed. This will significantly improve access to key shops, services, and entertainment facilities for this population. The improvements occur on each branch of the system with the largest accruing to Southall and Slough. The reduced catchment for Maidenhead is due to the replacement of some limited or non-stop Great Western services to Paddington with all stopping Crossrail services.

TABLE 6.6: PERCENTAGE INCREASE IN THE NUMBER OF HOUSEHOLDS LIVING WITHIN 30 MINUTES OF MAJOR CENTRES

	Number of households within 30 min	Number of households without a car within 30 min
Major Centre	% change on Base	% change on Base
Southall	28%	30%
Slough	34%	25%
Romford	9%	11%
Ilford	8%	11%
Stratford	7%	6%
Ealing	2%	0%
Brentwood	0%	0%
Maidenhead	-4%	-16%

6.3 Approach to assessment and assumptions

- 6.3.1 The impacts of Crossrail on employment are associated with increased employment opportunities for the unemployed and economically inactive residents of regeneration areas due to improved accessibility from locations served by Crossrail and employment associated with increased commercial and residential development attracted to locations served by Crossrail.
- 6.3.2 This analysis can only provide a broad indication of possible employment impacts. It has to assume that unemployment and economic activity rates in areas that are presently designated regeneration areas will remain similar to those pertaining at present. Unemployment levels and economic activity rates are closely linked. Higher levels of unemployment discourage economic activity while as employment opportunities increase economic activity rates rise. In assessing employment impacts it has been assumed that economic activity rates in regeneration areas will rise to the average for non-regeneration areas in response to these new opportunities.
- 6.3.3 In assessing the development opportunities by location, account has to be taken of the fact that the property market is notoriously heterogeneous and difficult to predict. Each local area has its own peculiarities and market dynamics making it difficult to accurately predict future market conditions. Given the many factors that impact on the property market, it is impossible to isolate the effect of a particular transport scheme or regeneration initiative with certainty. Nevertheless, Crossrail will have positive impacts on local property markets along the route. That is, Crossrail will encourage development and the move towards higher value uses due to improvements in accessibility, capacity and the image of the areas served. Nowhere, it is predicted, will Crossrail have a negative effect on the property market. The nature, scale and

timing of the impact will, however, vary according to local conditions. For some areas, Crossrail will bring significant property market and regeneration benefits; for others, it will be beneficial but is unlikely to have a significant bearing on the timing or scale of development.

6.3.4 A review of the areas served by Crossrail has been undertaken in order to estimate the scale of residential and commercial development that might happen over the next 12-15 years (and in some cases beyond) and consider how much of this might be attributable to Crossrail.

6.3.5 Crossrail will facilitate significant additional commercial and residential development at various centres served by the scheme. These will not be new jobs for London as a whole but they will be additional jobs for the benefiting areas.

6.3.6 The analysis has focused on:

- establishing the potential quantum of development in terms of employment floorspace and residential units;
- estimating the proportion of development due to Crossrail's effect on relieving transport constraints and improving the image of areas;
- converting commercial floorspace figures into number of jobs (depending on the anticipated use and development density);
- converting the number of residential units into population figures (assuming the number of people per dwelling);
- estimating local area (services and support) jobs attributable to the increase in local area population;
- estimating the take-up of jobs by regeneration area residents.

6.3.7 The methodology for establishing the amount of floorspace or homes has varied according to the level of information available for each area. Outside Central London, property information is patchy with no single source of information. Information has been pieced together on the property market and future development data from a number of sources including:

- local area inspections;
- interviews with local authority regeneration and property officers;
- schedules of development sites provided by some local authorities;

- ODPM discussions and reports;
- LDA discussions, reports and residential sites database;
- The London Plan (Mayor of London's Spatial Development Strategy for Greater London);
- other regeneration bodies' reports and schedules;
- published property market information;
- local property agents.

6.3.8 Such information helps to establish the current development pipeline based on known sites for the short to medium term (5-10 years); and development aspirations in the longer term (to around 2021). Because Crossrail is not expected to open until 2013, a great deal of judgement in establishing longer term development potential attributable to Crossrail is required. This is especially so in areas where the over-arching vision for an area is not yet reflected in either local planning policy or the development pipeline.

6.4 Impact by location

6.4.1 This section sets out, principally for regeneration areas, the anticipated impact in the view of Drivers Jonas that Crossrail will have in terms of commercial and residential development. A summary tabulation is given as Appendix G.

Maidenhead

6.4.2 Crossrail will further augment the appeal of Maidenhead by improving the quality of journeys and creating new journey possibilities. However, the amount of development attributable to Crossrail in Maidenhead is likely to be low. Both commercial and residential developments will come forward without Crossrail, due to sustained housing demand and the significant impact of Terminal 5 at Heathrow. It is anticipated that by 2021 only 10% of housing units forecast (125 in number) and 100 jobs will be attributable to Crossrail.

Slough

6.4.3 Crossrail is perceived to be a positive image builder and a catalyst to give developers confidence to invest in the town. However, the regional commercial property market and Heathrow Airport are likely to be greater determinants of development in Slough. In the medium to long term Slough is likely to see significant residential and mixed use development with the

opening of Terminal 5. It is anticipated that only 10% of the 2,600 homes that will be built and the 8,000 jobs that will be created in Slough town centre up to 2021, will be attributable to Crossrail.

Hayes

- 6.4.4 From spring 2005 Heathrow Express will provide a stopping service at Hayes, which will greatly improve accessibility for residents to Heathrow and central London. Whilst Crossrail will bring further accessibility benefits, it is not thought that it will have a large effect on future development. Of the 1,200 homes that will be built and the 4,700 jobs that will be created in Hayes town centre up to 2021, it is estimated that only 10% of these will be attributable to Crossrail.

Southall

- 6.4.5 The Heathrow Express stopping service that comes into service in spring 2005 will enable Southall residents to more easily access employment at Heathrow Airport. Crossrail will increase accessibility to employment opportunities in the Thames Valley and Central London. In addition to removing perceived barriers to eastward commuting by local residents, Crossrail is expected to encourage an increase in cultural tourism and leisure trips to Southall from other parts of London. It is anticipated that, 20% of the development in Southall forecast to take place up to 2021 will be attributable to Crossrail, that equates to just under 1,000 residential units and 1,700 jobs.

Ealing Broadway

- 6.4.6 Ealing's popularity as both a business and residential location is well established. Crossrail will be an added attraction for Ealing, but the majority of the development forecast to take place in Ealing up to 2021 is likely to take place anyway. It is estimated that 10% of the residential, that is 250 units, and 15% of the jobs growth (1,200 jobs) forecast for the centre of Ealing will be attributable to Crossrail

Paddington

- 6.4.7 Whilst Paddington already has excellent transport infrastructure, Crossrail will greatly improve its accessibility to and from the City of London and the Isle of Dogs. This will increase the appeal of the area to office occupiers considering re-locating from more central parts of London. It will also underpin the long-term sustainability of the new major office schemes at Paddington. It is estimated that as a result of Paddington's existing popularity as a residential location, only 10% of the 3,000 new homes forecast in the London Plan will be attributable to Crossrail. However, it will have a greater impact on economic activity with 25% of new jobs attributable to Crossrail, that is 5,800.

Farringdon

- 6.4.8 Whilst already very accessible, Crossrail will greatly enhance Farringdon's image and overcome the present negative perception amongst occupiers and investors despite its closeness to the core City Square Mile.

Stratford

- 6.4.9 Substantial new development is proposed at Stratford based on the new CTRL link. Crossrail is needed to support this growth due to actual and perceived capacity constraints and will have a significantly positive impact on both residential and commercial developments by addressing the present transport capacity constraints. Overall 9,500 jobs and 2,200 residential units are judged to be attributable to Crossrail.

Whitechapel

- 6.4.10 Crossrail will provide a direct link with the Isle of Dogs, greatly increasing Whitechapel residents' access to the major centre of employment at Canary Wharf. It will be key in improving the image of Whitechapel encouraging new residential development in residential areas, which in turn will increase demand for leisure and retail led developments on Whitechapel Road. It is anticipated that 10% of the new homes envisaged in Whitechapel and 25% of the jobs will be attributable to Crossrail. This is equivalent to 70 residential units and 3,500 jobs.

Isle of Dogs / Poplar

- 6.4.11 The LDA estimate that by 2021 a further 10,700 homes will be built on the Isle of Dogs. It is estimated that 10% of this will be attributable to Crossrail. Over the next 15-20 years employment growth is estimated to be 100,000, in line with the GLA's aspirations. Further sites are likely to come forward for development, so this could be a conservative estimate. Such an increase in employment, however, is not sustainable without the increased capacity and journey possibilities that Crossrail will provide. Crossrail will improve business to business accessibility to the Isle of Dogs from the City of London, the West End and Heathrow. It will also provide improved access from the east, notably from potential new settlements around Greenhithe, Swanscombe and Ebbsfleet, which are forecast to provide over 30,000 homes over the next 15 to 20 years. Because of capacity improvements and improved access to labour supply and the central London business cluster, it is estimated that 40% of the increase in employment (or 40,000 jobs) can be attributed to Crossrail.

Forest Gate

- 6.4.12 Crossrail will significantly increase the profile and greatly improve the image of Forest Gate, as well as providing greater rail capacity to London. As a result it is likely that the number and scale of residential developments in Forest Gate will increase. It is anticipated that 50% of jobs accommodated and new homes completed in Forest Gate up to 2021 will be attributable to Crossrail, that is, 1,000 jobs and 800 residential units.

Manor Park

- 6.4.13 Crossrail will broaden the appeal of Manor Park as a residential area. Increased residential demand will be a catalyst for the development of mixed use schemes along Romford Road as the existing marginal retail sites become available. It is anticipated that in the period to 2021, 25% of future development, equivalent to 200 housing units, will be attributable to Crossrail.

Ilford

- 6.4.14 Whilst there are plenty of sites and demand to support further development, the local authority is conscious that this will be greatly constrained by the capacity of Ilford station and the Liverpool Street rail service. Without the increase in capacity that Crossrail will bring, the local authority will have to restrict further development to ensure transport demand from Ilford residents does not exceed available capacity. In addition Crossrail will support a more sustainable pattern of development will be possible in Ilford town centre with higher densities of residential units and less reliance on private cars as a means of transport.
- 6.4.15 Redbridge BC anticipates that 1,650 housing units will be completed and 2,500 new jobs will be created in Ilford town centre without Crossrail. With Crossrail, it is anticipated that a further 3,850 housing units will be completed and a further 2,500 jobs created.

Brentwood

- 6.4.16 It is anticipated that Crossrail will broaden the appeal of Brentwood as a residential location to those commuting to Central London, thus increasing demand for residential accommodation and local services. This increased demand is expected to be reflected in house prices, rather than the quantum of development. It is anticipated that 10% of future homes and jobs will be attributable to Crossrail, totalling 70 jobs and 450 residential units.

Royal Docks

- 6.4.17 Although the presence of London City Airport imposes height restrictions on development, Crossrail will support higher development densities and, most importantly, increase accessibility and improve perception. The LDA have significant land holdings, so site assembly and availability is not a constraint on development. Residential development is likely to continue without Crossrail. However, after 2012 (one of the LDA's forecasting dates), Crossrail will be needed to support the additional 2,000 dwellings proposed from this date.
- 6.4.18 It is anticipated that Crossrail will be the catalyst for accelerating employment development activity by encouraging occupier demand, which will remain patchy until a critical mass of development is built up. It is estimated that Crossrail could facilitate around 11,000 jobs in the Royal Docks area out of a site capacity total (beyond 2021) of around 49,000 jobs. This is based on a site by site assessment. The figures assume that high-density development is promoted from the outset.

Abbey Wood

- 6.4.19 Crossrail will improve journeys to central London and the image of the area which will be a catalyst for residential development. With regard to the availability of sites and research carried out by the LDA and Bexley and Greenwich local authorities, it is estimated that 1,500 new residential units will be constructed at Abbey Wood up to 2021. The accessibility improvements and image change that Crossrail will deliver are of such magnitude that it is estimated that 50% of these residential units will be attributable to Crossrail.

6.5 Potential additional workers in regeneration areas

- 6.5.1 The economic activity rate in regeneration areas within one kilometre radius of Crossrail stations is lower than in non-regeneration areas and the unemployment rate is also higher (*Table 6.7*).

TABLE 6.7: ECONOMIC ACTIVITY RATES ALONG THE CROSSRAIL ROUTE

One kilometre radius of Crossrail stations	Economically active	Economically active, Unemployed
Regeneration areas only	57%	12%
Non-regeneration areas only	69%	6%
All areas	66%	7%

- 6.5.2 Economic activity rates are closely linked to employment opportunities. As employment opportunities increase economic activity increases. If it is assumed that the economic activity rate in regeneration areas within one kilometre radius of Crossrail stations will increase to the levels of non-regeneration areas (within one kilometre radius), it is possible to obtain an estimate of the potential additional available workers in the regeneration areas.
- 6.5.3 Potential additional available workers are those people who are not currently economically active but will become active after Crossrail comes into operation, in addition to the currently unemployed.
- 6.5.4 As *Table 6.8* illustrates, there could be nearly 30,000 potential additional available workers in regeneration areas within one kilometre radius of Crossrail stations. The most noticeable increase in Whitechapel, where 5,700 new potential workers could become available. Other regeneration areas that could see significant increases in potential available workers include Forest Gate, Liverpool Street and Manor Park.

TABLE 6.8: POTENTIAL ADDITIONAL AVAILABLE WORKERS –20% MOST DEPRIVED AREAS WITHIN ONE KILOMETRE RADIUS OF CROSSRAIL STATIONS

	Economically Active, Employed	Potential Additional Available Workers
West Drayton	300	0
Hayes	600	200
Southall	4,100	1,200
Hanwell	1,700	700
West Ealing	700	0
Acton Main Line	700	200
Paddington	5,900	1,600
Tottenham Court Road	2,800	500
Farringdon	5,300	1,500
Liverpool Street	4,200	3,900
Whitechapel	11,100	5,700
Isle of Dogs	4,300	2,100
Royals	2,800	900
Abbey Wood	3,500	1,200
Stratford	3,700	1,300
Forest Gate	7,500	3,300
Manor Park	4,600	2,200
Ilford	2,700	1,200
Chadwell Heath	2,800	600
Romford	600	100
Total	69,700	28,300

6.6 Employment opportunities due to improved accessibility to work

6.6.1 The accessibility chart earlier in this section illustrated the additional number of jobs that become available within a 30 minute isochrone. The Census Travel to Work data provides an indication of the take up of jobs in central London by residents of each Borough. This gives a penetration rate which varies along the route from 0.6% to 2.4%. Using that penetration rate and matching qualifications of the unemployed and economically inactive with the skills required for work within London as whole an assessment has been made of the number of jobs that could be taken by presently unemployed and economically inactive residents of regeneration areas along the route. This figure comes to 14,000.

6.7 Employment opportunities due to new commercial and residential developments

6.7.1 Given the uncertainties in terms of development and the assumptions used with regard to unemployment and economic activity the impacts presented here are indicative, being based on a series of assumptions that are felt to be reasonable at each stage. However, given potential margins of error these figures are best looked at in total or sub-total by area, rather than at individual local or station level. The assessment indicates that 80,000 additional jobs and 40,000 people will be attracted to key regeneration areas served by Crossrail.

6.7.2 This will provide new job opportunities for the residents of these areas. Based on existing take up of jobs in these areas by local people, the skill level of the available workforce and the probable skills required by employers it has been assessed that 17,000 of these jobs will be taken up by unemployed and economically inactive residents of regeneration areas within a 2 kilometre catchment area of the relevant Crossrail station. A two kilometre radius has been used as this is the equivalent of a 30 minute catchment area and represents a conservative assessment of travel to work distances.

6.8 Loss of jobs due to increased competition

6.8.1 However, improved accessibility to regeneration areas also means additional competition for jobs in these areas. Taking present penetration rates of local jobs by non-residents of the area and the increase in catchment area resulting from Crossrail it has been estimated that there may be a loss of nearly 22,000 jobs from regeneration area residents.

6.8.2 The net impact of all these factors is that some 9,000 presently unemployed and economically inactive residents of regeneration areas along the route will obtain employment as a result of the secondary impacts of Crossrail. *Table 6.9* shows the impact by route section and the various components that make up this 9,000 figure.

TABLE 6.9: NET ADDITIONAL JOBS BY ROUTE SECTION ACCRUING TO UNEMPLOYED AND ECONOMICALLY INACTIVE RESIDENTS OF REGENERATION AREAS ATTRIBUTABLE TO CROSSRAIL – BASE CASE.

	Additional jobs due to improved access to jobs out side the area	Jobs attracted to the area	Number of those jobs taken up by local unemployed and economically active residents of regeneration areas	People attracted to area	Associated jobs related to larger population taken by local people	Total jobs	Loss of jobs due to improved access to regeneration areas	Net increase in jobs
Western¹⁴	-200	4,300	1,400	4,100	100	1,300	600	700
Central¹⁵	6,600	58,800	9,900	8,800	100	16,700	13,600	3,100
North East¹⁶	5,800	3,600	1,800	12,800	200	7,700	1,300	6,400
South East¹⁷	1,800	13,900	3,900	14,900	200	6,000	7,000	-1,000
Total	14,000	80,600	17,000	40,600	600	31,700	22,500	9,200

6.8.3 Simple sensitivity analysis has been undertaken looking at the possible down and upsides in terms of commercial and residential developments. These lower and higher cases are set out in *Tables 6.10* and *6.11*.

¹⁴ Covers the area from Maidenhead to Acton

¹⁵ From Paddington to Isle of Dogs and Stratford

¹⁶ From Forest Gate to Shenfield

¹⁷ Covers Royal Docks to Abbey Wood

TABLE 6.10: NET ADDITIONAL JOBS BY ROUTE SECTION ACCRUING TO UNEMPLOYED AND ECONOMICALLY INACTIVE RESIDENTS OF REGENERATION AREAS ATTRIBUTABLE TO CROSSRAIL – LOW CASE.

	Additional jobs due to improved access to jobs outside the area	Jobs attracted to the area	Number of those jobs taken up by local unemployed and economically active residents of regeneration areas	People attracted to area	Associated jobs related to larger population taken by local people	Total jobs	Loss of jobs due to improved access to regeneration areas	Net increase in jobs
Western¹⁸	-200	2,100	800	2,400	0	600	600	100
Central¹⁹	6,600	34,700	6,500	4,800	100	13,200	13,600	-300
North East²⁰	5,800	2,200	1,200	8,200	100	7,000	1,300	5,800
South East²¹	1,800	7,100	2,500	8,400	100	4,400	7,000	-2,600
Total	14,000	46,100	11,000	23,800	300	25,200	22,500	3,000

6.8.4 In the low case the net increase in jobs attributable to Crossrail is 3,000 as a high proportion of the additional jobs coming into regeneration areas are offset by increased competition from outsiders for existing employment in the area.

6.8.5 The upside is that 12,500 jobs are taken up by the unemployed and economically inactive due to the higher number of jobs attracted to regeneration areas as shown in *table 6.11*.

¹⁸ Covers the area from Maidenhead to Acton

¹⁹ From Paddington to Isle of Dogs and Stratford

²⁰ From Forest Gate to Shenfield

²¹ Covers Royal Docks to Abbey Wood

TABLE 6.11: NET ADDITIONAL JOBS BY ROUTE SECTION ACCRUING TO UNEMPLOYED AND ECONOMICALLY INACTIVE RESIDENTS OF REGENERATION AREAS ATTRIBUTABLE TO CROSSRAIL – HIGH CASE.

	Additional jobs due to improved access to jobs outside the area	Jobs attracted to the area	Number of those jobs taken up by local unemployed and economically active residents of regeneration areas	People attracted to area	Associated jobs related to larger population taken by local people	Total jobs	Loss of jobs due to improved access to regeneration areas	Net increase in jobs
Western²²	-200	7,000	1,800	6,400	100	1,700	600	1,100
Central²³	6,600	86,900	11,600	13,000	200	18,500	13,600	4,900
North East²⁴	5,800	4,300	2,100	16,500	200	8,000	1,300	6,700
South East²⁵	1,800	21,900	4,700	23,000	300	6,800	7,000	-200
Total	14,000	120,100	20,200	58,900	800	35,000	22,500	12,500

6.9 Conclusion

- 6.9.1 Crossrail delivers radical improvements in accessibility across the route especially outside the central area. This improved accessibility benefits residents accessing a wide range of social services, retail, education and health facilities and employment.
- 6.9.2 Improved accessibility and enhancements of locations' image will lead to increased development along the Crossrail route. This will not be new development to London but a redistribution of existing forecasted growth of both jobs and people. The analysis shows that some additional 80,000 jobs and 40,000 people in excess of present forecasts will be attracted to locations served by Crossrail.
- 6.9.3 The improved accessibility from regeneration areas to employment opportunities in the central area and additional jobs attracted to Crossrail stations will bring benefits to regeneration areas along the line of route. Based on existing skill levels of the unemployed and economically inactive in regeneration areas served by Crossrail and the skill levels of the jobs attracted or accessible to them it is possible to estimate the take up of employment by this group. However, improved accessibility into

²² Covers the area from Maidenhead to Acton

²³ From Paddington to Isle of Dogs and Stratford

²⁴ From Forest Gate to Shenfield

²⁵ Covers Royal Docks to Abbey Wood

regeneration areas will also increase competition from outsiders offsetting some of these benefits. After netting out this it is estimated that Crossrail will result in 9,000 unemployed and economically inactive residents of regeneration areas obtaining employment.

- 6.9.4 Finally it should be noted that the regeneration and the agglomeration job numbers for the Isle of Dogs are not comparable. The agglomeration forecasts prepared by Volterra assess "constrained" employment growth forecasts with and without Crossrail.
- 6.9.5 The employment impact arising from increases in development floorspace prepared by Drivers Jonas are based on an assessment of how the implementation of Crossrail will change developers' expectations and proposals, and what the impact of those changes (a function of both accessibility changes and developer confidence) will be on total employment within the Isle of Dogs.
- 6.9.6 Drivers Jonas' forecasts are not "constrained" in the same way as Volterra's, but they take account of how Crossrail will change development patterns, which is not part of the agglomeration analysis.