

11. Environmental baseline and assessment of impacts: Northeastern section

11.1 Introduction

11.1.1 This chapter describes the northeast route section of Crossrail from Stratford to Shenfield the baseline situation and the significant temporary and permanent socio-economic impacts that will arise from its construction and operation.

11.1.2 The basic socio-economic and demographic characteristics of the areas in this section served by Crossrail are set out in *table 11.1*.

TABLE 11.1: SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF THE NORTH EASTERN SECTION

Age structure	<16 23%	16-25 15%	26-35 18%	36-45 15%	46-55 11%	56-65 8%	>65 11%
Ethnic groups	White % 55%	Mixed % 3%	Asian % 29%	Black % 11%	Chinese % 1%		
	Qualifications	No qualifications 28%	Level 1 16%	Level 2 20%	Level 3 9%	Level 4/5 22%	Other 6%
Econ activity / unemployment	Economic Activity Rate 64%	Unemployment Rate 7%					
	Number of jobs	Jobs 57,318					
Social grade	AB 22%	C1 32%	C2 13%	D 17%	E 16%		

11.2 Overview of Crossrail works in the northeastern route section

11.2.1 Crossrail services within the north east route section will use the Great Eastern Main Line. No new rail alignment will be created, although some new track will be required to provide a freight loop between Goodmayes and Chadwell Heath in order to replace an existing loop at Manor Park, which will be removed.

11.2.2 Crossrail will require new or extended platforms at several stations in order to accommodate its 210m long trains. At Romford and Ilford, new station buildings and other facilities will be provided as well.

11.2.3 Crossrail's other major new structures or facilities include a new dive-under (rail underpass) west of Romford. This will enable trains to access the sidings and depot to the south without hindering Crossrail services. A new depot will also be built on this existing site at Romford. New sidings will be provided at Ilford, Goodmayes and Shenfield.

11.2.4 The main elements of the scheme in this route section are summarised in *Table 11.2* below.

TABLE 11.2: MAIN ELEMENTS OF THE PROJECT IN THE NORTH EASTERN ROUTE SECTION (ROUTE WINDOWS WITH MAJOR WORKS ARE HIGHLIGHTED)

Route Window	Main Project Works	Local Authority
NE 1 Stratford Station (Biggers Road to Carnarvon Road)	Platform alterations	LB Newham
NE2 Forest Gate Station (Carnarvon Road to Balmoral Road)	Platform extensions	LB Newham
NE3 Manor Park Station (Balmoral Road to Gloucester Road)	Platform extensions Removal of freight loop	LB Newham
NE4 Ilford Station (Gloucester Road to Hainault Street)	Extension of platforms and removal of the bay platform Reconstruction of the ticket hall. New stabling sidings	LB Redbridge
NE5 Seven Kings Station (Hainault Street to St Albans Road)	Platform extensions.	LB Redbridge
NE6 Goodmayes Station (St Albans Road to Wadeville Avenue)	Platform extensions Introduction of new freight loop (Chadwell Heath Loop)	LB Redbridge
NE7 Chadwell Heath Station (Wadeville Avenue to Whalebone Lane South)	Platform extensions Track works Introduction of new freight loop (Chadwell Heath Loop)	LB Redbridge LB Barking and Dagenham
NE8 Romford Depot (west) (Whalebone Lane South to Sheringham Avenue)	Romford Depot Underpass and associated track works Widening of Jutsums Lane bridge	LB Barking and Dagenham LB Havering
NE9 Romford Station and Depot (east) (Sheringham Avenue to Carlisle Road)	Extension of platforms Reconstruction of the ticket hall Construction of a new depot	LB Havering
NE10 Gidea Park Station (Carlisle Road to Upper Brentwood Road)	Platform extensions.	LB Havering
NE11 Gidea Park Stabling Sidings (Upper Brentwood Road to Briars Walk)	New stabling sidings	LB Havering
NE12 Harold Wood Station (Briars Walk (western end) to Harold Court Road)	Platform extensions	LB Havering
NE13 LB Havering / Brentwood BC Boundary (Harold Court Road to M25)	None	LB Havering Brentwood BC
NE14 Brook Street (M25 to Kavanaghs Road)	None	Brentwood BC

Route Window	Main Project Works	Local Authority
NE15 Brentwood Station (Kavanaghs Road to Seven Arches Road)	Platform extensions.	Brentwood BC
NE16 Thrift Wood (Seven Arches Road to Woodway)	None	Brentwood BC
NE17 Shenfield Station (Woodway to Brentwood Long Ridings school)	New stabling sidings.	Brentwood BC

11.3 Route window NE1: Stratford Station

Baseline

- 11.3.1 This route window is centred on Stratford Station, a major transport interchange. The station will become an even more significant transport hub for East London with the opening of the CTRL station and the arrival of Crossrail. The area around the station comprises a large area of railway land to the north of Stratford station, which is currently the main CTRL worksite. Other parts of the route window are relatively built-up, with industrial areas to the southwest and residential areas to the east.
- 11.3.2 Around 11,000 jobs and 500,000m² of commercial floor space, two thirds of which are warehouses and factories, are based within one kilometre of the station. The neighbouring surroundings to the north are characterised by major regeneration and transport schemes such as the CTRL station, opening in 2007 and the Stratford City development. The latter is presently going through the planning approval process and has at time of writing (October 2004) received approval from the London Borough of Newham and the Mayor of London.

Main works

- 11.3.3 The works will involve the widening of platform five, which forms part of island platform three/four/five. Some refurbishment works in addition to the fitting of new platform furniture will also be undertaken on the platforms.

Temporary impacts and mitigation

- 11.3.4 There is no land take or demolition of buildings that will have a material impact on employment in the area. The Stratford Station worksite is allocated in the adopted Newham UDP for mixed use development as part of the wider Stratford Rail lands redevelopment. Once work is completed it is anticipated that land would become available for redevelopment. There are, therefore, no temporary significant impacts.

Permanent impacts and mitigation

- 11.3.5 There are no significant impacts.

11.4 Route window NE2: Forest Gate Station

Baseline

- 11.4.1 This section of the route follows existing rail lines and serves Forest Gate Station. The surrounding area includes retail, residential and light industrial developments. There are approximately 4,000 jobs and 150,000m² of commercial floor space within a kilometre of the station. Of the latter 40% is retail.

Main works

- 11.4.2 The main works in this route window comprise platform extensions.

Temporary impacts and mitigation

11.4.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.4.4 There are no significant impacts.

11.5 Route window NE3: Manor Park Station

Baseline

11.5.1 Manor Park Station is surrounded by parkland, cemeteries and residential developments. The area around the station comprises a mixture of residential, commercial and light industrial use. There are some 3,000 jobs and 50,000m² of commercial floor space within the station's catchment area.

Main works

11.5.2 The main works in this route window comprise platform extensions.

Temporary impacts and mitigation

11.5.3 Construction activity will require as a worksite land presently used for storage at 42 Station Road for around one year. This will not have a material impact on employment in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.5.4 There are no significant impacts.

11.6 Route window NE4: Ilford Station

Baseline

11.6.1 Centred on Ilford Station the area is characterised by retail activities, offices as well as residential uses. There are a number of shops in the locality of Ilford station, primarily located along Cranbrook Road, with a large shopping centre to the east of the station. To the north there are largely residential areas along York Road. To the south, commercial development is concentrated in a number of large office blocks along Ilford Hill. To the west, the rail corridor passes beneath the North Circular Road, with Ilford Golf Course and City of London Cemetery beyond.

11.6.2 About 11,000 jobs and 350,000m² of commercial floor space are situated within one kilometre of the station. More than half of this floor space is in retail use.

Main works

- 11.6.3 The works include the provision of a new station building and temporary tunnel fit out sidings on derelict land at the Aldersbrook sidings site to the west of the North Circular Road.

Temporary impacts and mitigation

- 11.6.4 Construction work will lead to the demolition of retail units and taxi office at the station itself and at 27-29 Cranbrook Road (Pops Tobacconist and Kart). In total this will lead to the displacement of approximately 10 jobs. Given the number of jobs available in the area this is not significant.

Permanent impacts and mitigation

- 11.6.5 There is the potential to redevelop the site of the present station building for commercial use mitigating the local job displacement. There are no significant permanent impacts.

11.7 Route window NE5: Seven Kings Station

Baseline

- 11.7.1 The route window covers Ilford train depot and Seven Kings station. This is mainly a residential area with some commercial, retail and light industrial developments in the wider neighbourhood. The area around the station comprises predominantly railway land/operations and commercial premises. There are approximately 4,000 jobs and 380,000m² of commercial floor space, half of which is retail.

Main works

- 11.7.2 Within this route window, two platforms will be extended to accommodate 10-car Crossrail trains. Platform works will be carried out in conjunction with track realignments, OHLE and signal works.

Temporary impacts and mitigation

- 11.7.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

- 11.7.4 There are no significant impacts.

11.8 Route window NE6: Goodmayes Station

Baseline

- 11.8.1 This route window covers the principally residential area around Goodmayes station. The area around the station comprises a densely built-up urban area intersected by the existing railway. There are residential neighbourhoods to the south, east and west of the station, and an extensive retail park to the

north. There are approximately 2,700 jobs and 130,000m² of commercial floor space within one kilometre of the station, of which roughly 60% is retail.

Main works

11.8.2 The main works in this route window comprise platform extensions at Goodmayes station and the construction of the Chadwell Heath freight loop.

Temporary impacts and mitigation

11.8.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.8.4 There are no significant impacts.

11.9 Route window NE7: Chadwell Heath Station

Baseline

11.9.1 The area around Chadwell Heath station comprises a heavily built-up residential area to the north of the railway line, with a more open urban landscape to the south, where depots and warehousing are located. The one kilometre catchment area around Chadwell Heath station contains about 4,000 jobs and 250,000m² of commercial floor space.

Main works

11.9.2 The main works comprise platform extensions to Chadwell Heath station and the construction of the Chadwell Heath freight loop.

Temporary impacts and mitigation

11.9.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.9.4 There are no significant impacts.

11.10 Route window NE8: Romford Depot (West)

Baseline

11.10.1 This route window contains a number of open spaces, industrial and residential uses. The area to the north of the GEML is dominated by the Westland's Playing Field. West Ham United Football Club (FC) training ground and residential areas, residential and industrial works are located to the south. Crowlands Heath Golf Course is also located to the south of the GEML.

Main works

- 11.10.2 The main works in this route window comprise the construction of a rail underpass in order to reduce conflicting movements between trains on the GEML and those moving to and from a new Romford depot. This will also require works to Jutsums Lane bridge.

Temporary impacts and mitigation

- 11.10.3 A number of sites will be acquired for contractor's compounds and worksites. These are mainly open spaces but include a training facility of West Ham United FC. However, this will not affect the viability of the club. Network Rail's OHLE maintenance facility will be displaced as will DA Skip Hire adjacent to 208 Crow Lane. There will be land take from the rear of businesses along Crow Lane including at 288, 208, 198, 188 and 178. However, it is not envisaged that construction activity will have a material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

- 11.10.4 There are no significant impacts.

11.11 Route window NE9: Romford Station and Depot (East)

Baseline

- 11.11.1 The area is characterised by a substantial number of retail units including a large shopping centre in Exchange street. A number of industrial units and warehouses are located to the south west of the station. Romford station is located to the west of South Street on the railway viaduct between Havanna Close and Atlanta Boulevard. South Street runs through the commercial and retail centre of Romford, connecting with the Romford ring road. The site of the depot and stabling sidings is surrounded primarily by industrial and commercial uses to the south, and by the GEML and residential neighbourhoods to the north, with Old Church Hospital immediately to the east of Nursery Walk. Within one kilometre of Romford Station there are around 13,000 jobs and almost 400,000m² of commercial floor space of which 60% are retail.

Main works

- 11.11.2 The main works in this route window will consist of a new depot and stabling sidings located on the old goods yard site to the west of Romford station and on the south side of the GEML. In addition, the works will include a rebuild and extension to Romford station.

Temporary impacts and mitigation

- 11.11.3 Construction work will impact on a Transco site and the local Royal Mail Sorting Office. However, this will not have a material impact on their operations. Redevelopment of the railway station requires the demolition of 110 – 116 South Street and a temporary loss of premises in The Battis with the potential displacement of 60-100 jobs, although parts of these premises are presently vacant. (Present occupiers include Whitecross Dental Care, and Luminar Dancing.) Given the availability of alternative retail premises and the

number of jobs in the area this is not deemed to be a significant impact. There will also be a loss of some 20 car parking spaces at a health club/fitness centre but it is not envisaged that this will have a significant impact on employment.

Permanent impacts and mitigation

11.11.4 Once the depot is operational it will create around 390 permanent jobs in the area. This will add 3% to the number of jobs in the local area and hence is a positive significant residual impact.

11.12 Route window NE10: Gidea Park Station

Baseline

11.12.1 The station area is dominated by suburban housing developments and a number of educational facilities. Within a one kilometre radius there are 7,000 jobs and about 35,000m² of commercial floor space.

Main works

11.12.2 The main works in this route window comprise platform extensions.

Temporary impacts and mitigation

11.12.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.12.4 There are no significant impacts.

11.13 Route window NE11: Gidea Park Stabling Sidings

Baseline

11.13.1 Crossrail follows existing rail lines. There are no stations in this section. The current stabling sidings are surrounded primarily with residential neighbourhoods to the north and south of the station, with light industrial units and warehousing to the south of the rail corridor. The Royal Liberty School is located on the northern side of Upper Brentwood Road. There are few shops in the locality, with no obvious town centre location. Light industrial, residential and commercial areas are located on the Southend Arterial Road located to the east of the stabling sidings.

Main works

11.13.2 The proposed Crossrail works at Gidea Park involve the extension of existing sidings and provision of new sidings in order to provide stabling for Crossrail trains.

Temporary impacts and mitigation

11.13.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.13.4 There are no significant impacts.

11.14 Route window NE12: Harold Wood Station

Baseline

11.14.1 This route window covers Harold Wood Station. The area around the station comprises residential neighbourhoods to the northeast, south and east, with small retail and commercial units along the northern sides of Station Road and Oak Road. Harold Wood Hospital is located to the northwest of the station, accessed from Gubbins Lane. Areas of open space exist at Harold Wood Park and along Ingrebourne River and Paines Brook. Around 2,000 jobs and approximately 180,000m² of commercial floor space are located within the station catchment area. Two-thirds of the floor space is dedicated to warehouses and factories.

Main works

11.14.2 The main works in this route window comprise platform extensions.

Temporary impacts and mitigation

11.14.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.14.4 There are no significant impacts.

11.15 Route window NE13: LB Havering/Brentwood BC

Baseline

11.15.1 Crossrail follows existing rail tracks. There is no station or work site in this section.

Main works

11.15.2 No Crossrail works will take place in this route window.

Temporary impacts and mitigation

11.15.3 There is no construction activity in this area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.15.4 There are no significant impacts.

11.16 Route window NE14: Brook Street

Baseline

11.16.1 Crossrail follows existing rail tracks. There is no station or worksite in this section.

Main works

11.16.2 No Crossrail works will take place in this route window.

Temporary impacts and mitigation

11.16.3 There is no construction activity in this area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.16.4 There are no significant impacts.

11.17 Route window NE15: Brentwood Station

Baseline

11.17.1 The area around Brentwood station comprises small-scale commercial, retail and light industrial premises, while the wider area is primarily residential. The station catchment area accommodates 5,000 jobs and 300,000m² of commercial floor space of which a third is industrial.

Main works

11.17.2 The main works in this route window comprise platform extensions.

Temporary impacts and mitigation

11.17.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.17.4 There are no significant impacts.

11.18 Route window NE16: Thrift Wood

Baseline

11.18.1 Crossrail follows existing rail tracks. There is no station or worksite in this section.

Main works

11.18.2 No Crossrail works will take place in this route window.

Temporary impacts and mitigation

11.18.3 There is no construction activity in this area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.18.4 There are no significant impacts.

11.19 Route window NE17: Shenfield Station

Baseline

11.19.1 The current land use in the immediate surrounding area is mainly residential with some small retail outlets and offices situated to the northwest of the station. Within one kilometre of the station are approximately 1,000 jobs and around 60,000m² of commercial floor space.

Main works

11.19.2 Works in this route window include the provision of additional stabling, a new platform and alterations to the Southend and Colchester rail lines.

Temporary impacts and mitigation

11.19.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.19.4 There are no significant impacts.

11.20 Route window R1: Pitsea Sidings

Baseline

11.20.1 The site is bounded to the north by a belt of open land. The elevated A13 highway passes to the north of the site on the far side of this open land. A hypermarket and residential buildings on the southern edge of Basildon are located to the immediate north of this highway. The eastern boundary of the

site is bounded by Pitsea Hall Lane. The area to the south is occupied by open marshland along with the Pitsea Landfill operated by Cleanaway.

Main works

11.20.2 The main works involve the development of a rail siding for unloading excavated material from rail to road for final delivery to the landfill site at Pitsea. The permanent works will comprise the introduction of railway tracks, lighting columns, unloading equipment, a new access road and a new building at the entrance to the site.

Temporary impacts and mitigation

11.20.3 Construction activity will have no material impact on businesses in the area and hence there are no temporary significant impacts.

Permanent impacts and mitigation

11.20.4 There are no significant impacts.