



# **London Borough of Tower Hamlets**

Local Development Framework

## **Infrastructure Delivery Plan**

Final Report

September 2009

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# 1 Introduction

## 1.1 Background and Process

- 1.1.1 This is the Infrastructure Delivery Plan (IDP) for The London Borough of Tower Hamlets (LBTH). The report is a supporting document for the Core Strategy and part of the Local Development Framework, and covers the plan period from 2010 to 2026 (though it will be periodically reviewed and monitored).
- 1.1.2 This written report includes details of the infrastructure needs, and explains the approach as to how and why we have identified these infrastructure items. This report also informs the Infrastructure Schedule, which is also included as an appendix to the Core Strategy DPD<sup>1</sup>.
- 1.1.3 The IDP includes the key infrastructure items which are required to meet the growth objectives set out in the Core Strategy. It is not a shopping list for planning obligations contributions, nor is it a way of capturing every project being planned for each council service. The IDP recognises there are other plans and strategies that exist which provide more detail in regard to what, how and when council services are being delivered, and strongly draws upon these in order to populate and inform this IDP.
- 1.1.4 The IDP process has involved consultation and involvement from a wide range of officers within the Council as well as with key partners across the Tower Hamlets Partnership (the Local Strategic Partnership). The approach to consultation is outlined in the Core Strategy Consultation Statement<sup>2</sup>. The IDP process included a number of key stages:
- A quantitative assessment of the current and projected supply and demand for infrastructure, using the Council's Planning for Population Change and Growth (PPC&G) Model<sup>3</sup>.
  - A review of planned capital and infrastructure investment, as detailed in various plans and strategies for each infrastructure category.
  - Gap analysis between the demand for, and supply of, various infrastructure elements over the lifetime of the Core Strategy.
  - A comprehensive process of engagement and collaboration with service providers to identify how service planning relates to future need, and how the IDP will influence the capital investment plans for other services. This involves both opportunities to deliver new infrastructure or opportunities for expanding existing provision, particularly where constraints exist, for example on space or the availability of funding.
  - To identify broad locations for infrastructure, where known.
  - A robust costing exercise for required infrastructure using information from capital programmes, or using appropriate assumptions or standard costings where costs have not been previously identified.

- Establishing a robust process for monitoring and updating the IDP, which will work across different services and feed into the Council's capital planning process. This includes appropriate governance structures and delivery arrangements for infrastructure, which will become the basis for coordinating and driving delivery.

## **1.2 Purpose of this Document**

- 1.2.1 The IDP has a twin remit - a planning role, and a corporate role. It has a formal planning role in that an IDP must satisfy the requirements of Planning Policy Statement (PPS) 12<sup>4</sup> and to complement and inform the Core Strategy. It does this through identifying the key pieces of infrastructure needed to achieve the objectives and policies in the Core Strategy, and identify the broad locations where the infrastructure will be located.
- 1.2.2 However it also has a corporate role for the Local Strategic Partnership, by which it will be a key document to support and inform other strategies and decisions relating to capital investment, and how funding should be distributed from sources such as planning obligations and the forthcoming Community Infrastructure Levy (CIL). The IDP will be 'owned' by the Asset Management and Capital Strategy Board, made up of key representatives of the Local Strategic Partnership.
- 1.2.3 The IDP is a living document. This is the first version of the IDP and therefore subsequent versions will include updates to the proposals and information contained within each of the service-based sections. This allows the infrastructure planning process to take account of any further updates to the various plans and strategies on which this IDP is based. It is intended that the IDP will be updated annually alongside the Annual Monitoring Report.
- 1.2.4 The IDP contains information regarding the type, timing and potential costs of infrastructure needed to support the growth proposed by the Core Strategy. The IDP and its subsequent updates enable the Council to plan effectively for this growth and to maximise the potential associated with this growth to achieve wider sustainability, economic, social and environmental objectives.
- 1.2.5 The infrastructure identified in this document will need to be considered by all delivery processes that the Council manages. The IDP is therefore a key consideration for delivery documents that includes master plans and development documents, as well as through mainstream service plans and strategies.

### **1.3 Policy context**

1.3.1 PPS12 and the consultation paper ‘Streamlining Local Development Frameworks’<sup>5</sup> states that adequate infrastructure planning is a key test of soundness for Core Strategies. The Council therefore has a statutory duty to produce an LDF Core Strategy and therefore a statutory duty to establish a programme of infrastructure investment and delivery.

1.3.2 PPS12 states that the infrastructure planning process should identify:

- Infrastructure needs and costs
- The phasing of development
- Funding sources and
- Responsibilities for delivery.

1.3.3 The structure and approach taken in the IDP has been chosen to meet the requirements set out in PPS12.

### **1.4 Local context**

1.4.1 The context in which spatial planning and infrastructure delivery takes place in Tower Hamlets is important to consider. The socio-economic profile, the economy, geographical location and urban structure are all important factors which influence the approach taken to infrastructure planning. The high levels of projected growth within a relatively dense and urban area strongly influence how and where infrastructure such as open space, schools, leisure facilities and health centres are delivered. The changing demographic mix can also affect what kinds of services are needed, and when they are needed by. Therefore a degree of flexibility has been built into this IDP to provide a framework within which further, more detailed infrastructure planning decisions to take place, sensitive to the context in which they are made.

### **1.5 Approach and Assumptions**

1.5.1 Infrastructure has a very broad definition, and infrastructure in which the Council is involved in delivering can cover anything from large scale transport schemes down to streetscape improvements. It is important to be clear about what infrastructure is needed to support the Core Strategy and what is not, in order to be able to prioritise and manage funding and resources.

1.5.2 To aid this process and ensure the IDP remains a clear, focused and effective document and tool, criteria have been developed as a means to agree its content.

1.5.3 The criteria for including items in the IDP are when the Council has a role in:

- a) The direct delivery of the infrastructure through its spatial policies (such as linking key regional projects into local plans, or allocating specific sites in later development plan documents)
- b) The direct funding of the infrastructure
- c) Indirect funding of infrastructure through enabling private sector investment including planning obligations
- d) Indirect funding through influencing third party public sector investment
- e) Providing a statutory service which impacts on its spatial policies (such as schools).

1.5.4 Considerations are also made in regard to the prioritisation of infrastructure, this is especially important when there are concerns regarding the availability of funding through both planning gain as a result of the unstable housing market, and funding due to expected constraints on public expenditure. It is also recognised that some infrastructure is required as a result of population growth and change, whereas some infrastructure is needed to improve quality of life for residents or to achieve sustainability objectives. The Infrastructure Schedule therefore identifies which infrastructure is *critical* in relation to delivering Core Strategy growth objectives, which infrastructure is *necessary* but not critical, and which is *preferred* if funding is available.

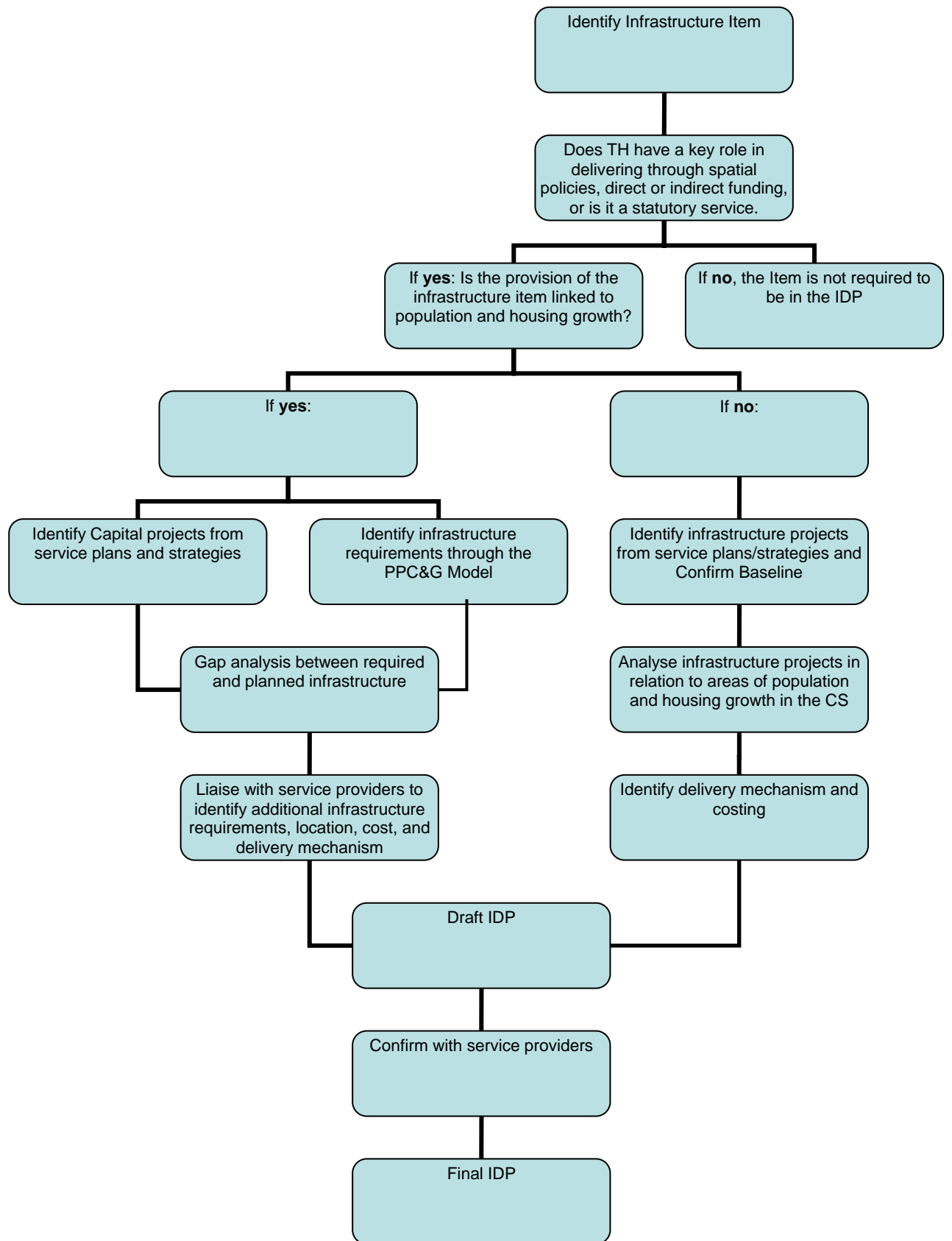
1.5.5 A methodological process was developed so a consistent approach could be taken for each item of infrastructure. This is shown below as Figure 1.

1.5.6 Items included in the IDP are:

- Health – primary and acute health care
- Education – primary and secondary, pre-school, further and higher education
- Transport and connectivity
- Utilities, waste and flooding
- Publicly accessible open space
- Leisure and cultural infrastructure – leisure centres and Idea Stores
- The Emergency services.



Figure 1: IDP Process Diagram



### **1.5.7 The Population Change and Growth Model**

- 1.5.8 Tower Hamlets have created a Planning for Population Change and Growth (PPC&G) Model which identifies, by location and over time, how the borough's population is set to change as a result of natural growth and planned development. It uses data including birth rates and housing development information to calculate when and where the population will change.
- 1.5.9 This model supports the Borough's spatial and service planning decisions. It monitors housing development, projects population growth and related demographic changes, and converts this population data into what impacts it will have on various kinds of infrastructure. It uses data on current capacities and deficiencies, and uses agreed standards to identify what the future demand on and supply of infrastructure will be. This information then feeds into policy and detailed service planning decision-making processes.
- 1.5.10 A draft baseline report which includes details of the method, inputs and outputs from the Model is part of the evidence base of the Core Strategy. A summary of the main findings of this is included in Chapter 2 of this report.

### **1.5.11 Report Structure**

- 1.5.12 For each item of infrastructure this IDP addresses the following questions, which establishes the justification for and approach to provision of the various pieces of infrastructure needed to underpin the Core Strategy. These key questions relate to the requirements specified in PPS12, and are answered for each infrastructure item through a written narrative, with a schedule providing a summary of the key infrastructure requirements.
- 1.5.13 These key questions include the following:
- **Why?** This section contains the justification for new infrastructure, using the PPC&G model to identify the current capacity and future demand for infrastructure. It will also take into account changes in the way services are being provided, which also impacts upon infrastructure planning.
  - **What?** To identify the number and type of infrastructure items needed according to the evidence identified in the above.
  - **How?** Addressing how the infrastructure will be delivered, including the lead delivery partner, the delivery mechanism, and identified funding sources. It also identifies any risks to funding, plus the related contingency measure. The IDP only states costs where it is appropriate to do so – this is based on current knowledge in relation to the priority of the project. Where the exact location or type of infrastructure is still being identified, or the timescale still not confirmed, broad costs have been used including the assumptions made, or alternatively the process by which costs will be

identified is stated. More detailed costs can then be provided as the IDP is updated and monitored.

- **Where?** The IDP identifies the proposed locations for new infrastructure. The geographical level at which this location is provided takes into account the type of infrastructure and its catchment. The geography at which locations are identified in the IDP is chosen to ensure that it does not prejudice the outcome of the Site and Place Making DPD, and so uses areas of search rather than specific locations. Various geographies are used in the IDP, including London-wide or regional, sub-regional or East London, Borough-wide, paired LAPs or 'Places', as identified in the Core Strategy. Paired LAPs or places are the preferred level of geographical analysis, as infrastructure needs to be provided close to growth, and this allows some flexibility and pragmatism so appropriate locations for infrastructure can be made through the subsequent Site and Place Making DPD and individual service plans and strategies.
- **When?** Timescales have been indicated as to when the infrastructure will need to be delivered. These timescales reflect impacts on capacity, and are determined by housing growth assumptions. These relate to the time periods used in the Core Strategy: 2010-2015, 2016-2020, and 2021-2025, plus 2025 and beyond where relevant.

#### ***1.5.14 Consultation and engagement***

1.5.15 The IDP was produced in consultation with a range of internal and external partners. The method for this is identified for each category of infrastructure below:

- Health - through meetings and liaison with NHS Tower Hamlets
- Education - through meetings and liaison with the Children, Schools and Families Directorate
- Transport & Connectivity - through meetings and liaison with officers in the Transport and Major Projects teams
- Utilities - through representations made on the Core Strategy, and through liaison with Thames Water
- Waste - through meetings and liaison with the Council's waste planning officer
- Flooding - through meetings and liaison with relevant officers in Strategic Planning and the Environment Agency
- Open space - through meetings and liaison with relevant Parks Development Officers and Strategic Planning
- Leisure and Culture - through meetings and liaison with representatives from the Communities, Localities and Culture Directorate
- Emergency Services - through meetings and liaison with representatives from the fire Service and Metropolitan Police Service.

1.5.16 The IDP also consulted and reported to a range of internal management groups, and with members through the Cabinet.

## **2 The Demand for Infrastructure - Population Growth and Change**

### **2.1 The Planning for Population Change and Growth Model**

2.1.1 This section provides a brief summary of the main housing and demographic changes which the Borough is projected to undergo over the lifetime of the Core Strategy (up to 2025). It is these pressures which have an impact upon the demand and supply of infrastructure, which this IDP addresses.

2.1.2 The Planning and Population Change and Growth (PPC&G) Model aims to understand and monitor population change and growth in such a way so that the Council and Tower Hamlets Partnership have the best possible information to plan for the timely and adequate provision of modern infrastructure and services for local people.

2.1.3 It should be noted that this capacity assessment is a strategic exercise intended to inform the emerging Core Strategy for Tower Hamlets, the accompanying Infrastructure Schedule and Infrastructure Delivery Plan. The capacity assessment exercise identifies the potential requirements for community infrastructure and open space to support the anticipated scale of development within the borough over the Core Strategy's plan period to 2025.

2.1.4 The following sections of this summary highlight the key inputs of the Planning for Population Change and Growth model and some of the key findings of the capacity assessment. Further detail is provided in the baseline report, part of the Core Strategy evidence base.

#### **2.1.5 *Method, standards and assumptions used***

2.1.6 The Planning for Population Change and Growth Model is based on a series of land-use assumptions, together with a range of other assumptions, which were used to derive development outputs for the identified development sites over time. The development sites are made up of Permitted sites (those with planning permission) and Potential sites (those with development potential). The land-use assumptions in the Planning for Population Change and Growth model reflect the Local Development Framework Core Strategy.

2.1.7 In order to analyse the projected demand for infrastructure, various standards have been used for the use of education, health and leisure infrastructure as and for open space requirements. Details of these assumptions can be found in the accompanying PPC&G Baseline Report.

#### **2.1.8 *Spatial Analysis***

2.1.9 This report presents information at three different spatial scales to reflect the way in which local services are delivered. For example,

primary school provision is considered at Place, Paired LAP and Borough scales, while secondary school provision is considered at Paired LAP and Borough scales. This reflects the nature of different social infrastructure and their catchments. This report sets out information on the capacity assessment at three spatial scales. These are Borough, Paired LAP, and Place.

2.1.10 The Paired LAP areas are as follows:

- LAP 1 & 2
- LAP 3 & 4
- LAP 5 & 6
- LAP 7 & 8

2.1.11 The LAP boundaries are shown in Figure 2 below.

**Figure 2: LAP Boundaries**



2.1.12 The 'Places' are defined and presented in the emerging Local Development Framework Core Strategy, and have been determined as a result of character analysis and local consultation. The 'Places' are listed below.

**LAP 1 & 2**

Shoreditch  
Spitalfields  
Bethnal Green  
Globe Town

**LAP 3 & 4**

Aldgate  
Tower of London  
Wapping  
Whitechapel  
Stepney  
Limehouse  
Shadwell

**LAP 5 & 6**

Victoria Park  
Fish Island  
Bow  
Bromley-by-Bow  
Mile End  
Bow Common

**LAP 7 & 8**

Poplar Riverside  
Poplar  
Leamouth and Blackwall  
Canary Wharf  
Millwall  
Cubitt Town

2.1.13 The Place boundaries, identified for analysis purposes through the PPC&G Model, are shown in Figure 3 below.

**Figure 3: Place Boundaries**



2.1.14 The capacity assessment exercise considers land use changes and infrastructure provision within Tower Hamlets over the period from 2010 to 2025. The Local Development Framework period covers the same timeframe. To enable further analysis and understanding, this is sub-divided into the following sub-periods:

- 2010 to 2015
- 2016 to 2020
- 2021 to 2025

2.1.15 On the basis of these time periods, assumptions are made within the Planning for Population Change and Growth model about when

development schemes will be completed and when supporting infrastructure will be provided.

## **2.2 Population Growth and Change Projections**

2.2.1 The Core Strategy states that, in line with the housing targets set out in the London Plan, the Borough will seek to deliver 43,000 new homes from 2010 to 2025. The Model's projected housing and population figures are shown below.

### **2.2.2 Total New Homes**

2.2.3 The lower density housing projections suggest that 35,497 new homes could be delivered in Tower Hamlets over the plan period. The higher density scenario suggests the figure could be 43,170 new homes. This is shown by paired LAP in Figure 4 and Figure 5 below, and by Place in



2.2.4 Figure 6.

**Figure 4: Total New Homes - Lower Density**

<b>Total New Homes</b>			
	<b>2010-2015</b>	<b>2015-2020</b>	<b>2020-2025</b>
LAPs 1&2	3,094	2,758	1,335
LAPs 3&4	1,019	2,507	298
LAPs 5&6	2,904	3,522	433
LAPs 7&8	5,840	7,946	3,839
<b>Tower Hamlets Total</b>	<b>12,858</b>	<b>16,733</b>	<b>5,905</b>

**Figure 5: Total New Homes - Higher Density**

<b>Total New Homes</b>			
	<b>2010-2015</b>	<b>2015-2020</b>	<b>2020-2025</b>
LAPs 1&2	3,336	3,503	1,989
LAPs 3&4	1,060	2,988	442
LAPs 5&6	3,124	4,523	571
LAPs 7&8	6,407	10,428	4,798
<b>Tower Hamlets Total</b>	<b>13,927</b>	<b>21,442</b>	<b>7,801</b>

**Figure 6: Total New Homes by Place**

	Lower Density				Higher Density			
	2010 - 2015	2015 - 2020	2020 - 2025	Total	2010 - 2015	2015 - 2020	2020 - 2025	Total
Aldgate	511	508	-	<b>1,019</b>	511	724	-	<b>1,235</b>
Bethnal Green	394	368	37	<b>799</b>	539	616	43	<b>1,197</b>
Blackwall & Leamouth	524	1,480	1,884	<b>3,888</b>	524	1,646	1,884	<b>4,054</b>
Bow	437	84	25	<b>546</b>	471	143	40	<b>654</b>
Bow Common	683	853	-	<b>1,537</b>	747	1,148	-	<b>1,895</b>
Bromley by Bow	901	624	44	<b>1,569</b>	1,022	734	74	<b>1,830</b>
Canary Wharf	259	2,170	-	<b>2,429</b>	259	2,376	-	<b>2,635</b>
Cubitt Town	-	1,876	1,086	<b>2,962</b>	-	2,579	1,611	<b>4,190</b>
Fish Island	151	1,629	231	<b>2,011</b>	151	2,021	231	<b>2,403</b>
Globe Town	459	390	-	<b>849</b>	459	663	-	<b>1,122</b>
Limehouse	411	681	256	<b>1,348</b>	412	1,017	370	<b>1,799</b>
Mile End	854	332	203	<b>1,390</b>	940	477	336	<b>1,753</b>
Millwall	3,489	994	638	<b>5,121</b>	3,720	1,484	955	<b>6,159</b>
Poplar	404	612	-	<b>1,016</b>	587	1,040	-	<b>1,626</b>
Poplar Riverside	753	430	186	<b>1,369</b>	906	676	272	<b>1,854</b>
Shadwell	415	183	-	<b>598</b>	437	272	-	<b>708</b>
Shoreditch	412	374	692	<b>1,478</b>	424	393	1,026	<b>1,843</b>
Spitalfields	1,273	1,056	350	<b>2,679</b>	1,273	1,056	519	<b>2,848</b>
Stepney	28	248	87	<b>363</b>	47	271	148	<b>466</b>
Tower of London	89	-	-	<b>89</b>	89	-	-	<b>89</b>
Victoria Park	-	-	-	-	-	-	-	-
Wapping	193	1,278	-	<b>1,471</b>	193	1,278	-	<b>1,471</b>
Whitechapel	217	563	187	<b>967</b>	217	830	291	<b>1,338</b>
<b>Totals</b>	<b>12,858</b>	<b>16,733</b>	<b>5,905</b>	<b>35,497</b>	<b>13,927</b>	<b>21,442</b>	<b>7,801</b>	<b>43,170</b>

### 2.2.5 Demographic Change

2.2.6 The demographic outputs for each of the Paired LAPs and Tower Hamlets as a whole are set out in Figure 7, Figure 8 and Figure 9 below. This shows the anticipated population from the two housing density scenarios identified in section 2.2.2.

**Figure 7: Demographic Change - Lower Density**

Total New Population	2010-2015	2015-2020	2020-2025
LAPs 1&2	3,940	4,839	2,321
LAPs 3&4	576	4,414	391
LAPs 5&6	4,773	6,679	284

LAPs 7&8	9,920	15,416	6,505
<b>Tower Hamlets Total</b>	<b>19,208</b>	<b>31,349</b>	<b>9,502</b>

**Figure 8: Demographic Change - Higher Density**

<b>Total New Population</b>			
	<b>2010-2015</b>	<b>2015-2020</b>	<b>2020-2025</b>
LAPs 1&2	4,462	6,446	3,729
LAPs 3&4	665	5,452	702
LAPs 5&6	5,245	8,836	582
LAPs 7&8	11,141	20,765	8,574
<b>Tower Hamlets Total</b>	<b>21,513</b>	<b>41,499</b>	<b>13,587</b>

**Figure 9: Demographic Change by Place - Lower and Higher Density**

	Lower Density				Higher Density			
	2010 - 2015	2015 - 2020	2020 - 2025	Total	2010 - 2015	2015 - 2020	2020 - 2025	Total
Aldgate	863	1,027	-150	<b>1,740</b>	863	1,492	-150	<b>2,205</b>
Bethnal Green	425	451	-89	<b>787</b>	738	986	-78	<b>1,645</b>
Blackwall and Leamouth	820	2,879	3,926	<b>7,625</b>	820	3,237	3,926	<b>7,983</b>
Bow	514	-65	-1,103	<b>-653</b>	588	61	-1,071	<b>-422</b>
Bow Common	1,163	1,605	405	<b>3,174</b>	1,301	2,240	405	<b>3,947</b>
Bromley by Bow	1,571	1,158	628	<b>3,357</b>	1,832	1,396	694	<b>3,921</b>
Canary Wharf	415	4,182	-194	<b>4,403</b>	415	4,624	-194	<b>4,846</b>
Cubitt Town	-340	3,797	1,651	<b>5,109</b>	-340	5,313	2,783	<b>7,757</b>
Fish Island	299	3,499	444	<b>4,243</b>	299	4,346	444	<b>5,089</b>
Globe Town	833	659	-20	<b>1,472</b>	833	1,248	-20	<b>2,061</b>
Limehouse	522	1,268	603	<b>2,393</b>	524	1,992	850	<b>3,366</b>
Mile End	1,317	438	83	<b>1,839</b>	1,501	749	371	<b>2,621</b>
Millwall	6,346	1,894	759	<b>8,998</b>	6,843	2,949	1,443	<b>11,235</b>
Poplar	665	1,218	-30	<b>1,853</b>	1,059	2,140	-30	<b>3,169</b>
Poplar Riverside	1,406	766	264	<b>2,436</b>	1,735	1,298	449	<b>3,482</b>
Shadwell	260	34	26	<b>320</b>	307	224	26	<b>557</b>
Shoreditch	601	654	1,338	<b>2,593</b>	626	695	2,059	<b>3,381</b>
Spitalfields	1,702	2,156	479	<b>4,337</b>	1,702	2,156	843	<b>4,701</b>
Stepney	-293	308	786	<b>801</b>	-251	357	917	<b>1,024</b>
Tower of London	115	-13	-103	<b>-1</b>	115	-13	-103	<b>-1</b>
Victoria Park	-28	-32	-127	<b>-186</b>	-28	-32	-127	<b>-186</b>
Wapping	98	2,493	-650	<b>1,941</b>	98	2,493	-650	<b>1,941</b>
Whitechapel	-67	973	574	<b>1,480</b>	-67	1,547	799	<b>2,279</b>
<b>Totals</b>	<b>19,208</b>	<b>31,349</b>	<b>9,502</b>	<b>60,059</b>	<b>21,513</b>	<b>41,499</b>	<b>13,587</b>	<b>76,599</b>

Figure 10: Demographic Output - cumulative increase in population

Cumulative Population Impacts	Existing Population 2009*	Lower Density			Higher Density		
		2015	2020	2025	2015	2020	2025
LAPs 1&2	64,434	67,748	72,588	74,908	68,270	74,716	78,445
LAPs 3&4	53,495	53,453	57,867	58,259	53,542	58,994	59,696
LAPs 5&6	50,206	54,843	61,522	61,806	55,315	64,151	64,733
LAPs 7&8	66,838	76,190	91,606	98,111	77,412	98,176	106,750
<b>Tower Hamlets Total</b>	234,974	254,249	283,583	293,084	254,539	296,038	309,625

\* This reflects the GLA Population Projections - Low for 2009 (2008 Round)

## 3 Health

### 3.1 Primary Health Care

3.1.1 NHS Tower Hamlets and the Borough have produced both a Joint Strategic Needs Assessment<sup>6</sup> and a Strategy for Improving Health and Wellbeing<sup>7</sup> (IH&W Strategy) in Tower Hamlets. These documents form the main policy vehicles for health service delivery in the Borough. The main focus of this strategy is to implement a new model of integrated and co-located services which will deliver health services on a more localised basis through a network of new health facilities, reducing the need to visit a hospital.

3.1.2 The first IH&W Strategy was produced in 2006 and runs to 2016, and underwent significant consultation with both stakeholders and the public, with a refreshed version of this Strategy produced in January 2009. In addition to this a Strategic Programme Business Case<sup>8</sup> was developed in 2008 which outlined the capital investment and delivery aspects of the Health and Wellbeing Strategy. The strategy is currently undergoing a refresh due for completion in the autumn/winter 2009.

#### **3.1.3 *Why? – The rationale for a new approach to providing health services***

3.1.4 There are a number of factors which are changing the way in which primary health services are delivered. Partly this is a response to changes in national policy; partly due to changing local circumstances such as the unsuitability in current premises or opportunities arising to create new facilities; and importantly in relation to projected levels of population growth and change.

#### *3.1.5 The changing health policy context*

3.1.6 Following the Darzi review (2008)<sup>9</sup> the direction of delivering primary care in national health policy moved to a rationale of centralising services where necessary, and where possible providing more localised, less centralised care facilities, offering a range of services in the community across a localised network.

3.1.7 As a result of this, a programme to deliver a network of integrated health and wellbeing centres providing health and social care services and out-of-hospital care for the people of Tower Hamlets has been developed. This runs between 2008 and 2021.

3.1.8 The network approach is a service model which is built around a 'hub and spoke' model of neighbourhood services, serving in excess of 25,000 people, which would provide a range of health and social care services. Above this there would be a tier of locality networks covering 70,000 people, providing more specialist health and social care services which cannot efficiently be provided at the neighbourhood level due to their specialist nature. NHS Tower Hamlets facilities which

are the focus of this IDP will be planned in accordance with this network. They will therefore include GP services as well as other appropriate services, which will be identified as part of the individual project specification, which collectively will provide the range of services intended to be delivered across each locality. The locality described above equates approximately to the paired LAPs (or 'quarters' of the Borough as referred to in the IH&W Strategy).

### *3.1.9 Changing local circumstances*

3.1.10 There is also a pressing need to replace poor and inefficient buildings and facilities in which GPs are providing services, and as part of this bring together GPs into the network approach described above. This may also involve the refurbishment of existing premises in order to fit new service delivery models.

3.1.11 Regeneration schemes or development sites may also emerge which, given the current delivery mechanisms for delivering health services (such as those with private sector partners) present the opportunity to create a new health facility in line with the new approach.

### *3.1.12 Population Change and Growth*

3.1.13 NHS Tower Hamlets has worked in partnership with the Council to develop a robust methodology to calculate the impacts on health services of a rapidly growing population, and how the provision of health services needs to respond. This methodology has been adopted by the Planning for Population Change and Growth Model and is an important tool used by health planners in the development of the Improving Health and Wellbeing Strategy. The outputs of this process are shown on Figure 11 and

Figure 12 below, which determine how many GPs need to be planned for.

- 3.1.14 The Council and NHS Tower Hamlets have been working increasingly closely over recent years to ensure health planning and spatial planning is aligned. This involves both the sharing of information regarding population growth and change (through the model used in infrastructure planning) and planning collaboratively on the impact this would have on health services and how it needs to be adopted as part of the planning process and the LDF.
- 3.1.15 These projections are constantly changing as a result of current uncertainties in the housing market and the economy, and so the projections are being monitored and fed into the IH&W strategy as it develops. As a result of this a degree of flexibility has been retained in the Infrastructure Plan to allow the capital planning process to respond, for example in relation to the timing or location of a new health facility.

### 3.1.16 Existing Provision of GPs

3.1.17 The Planning for Population Change and Growth model considered healthcare provision in terms of GP numbers. For the purposes of the capacity assessment and the Planning for Population Change and Growth model, a standard of 1,800 people per GP is used. The current provision of GPs is shown in Figure 11. It should be noted that although this appears to indicate a surplus in GPs, the actual GP registered population is 252,000, significantly higher than the 234,974 represented here. NHS Tower Hamlets is responsible for the cost of any healthcare accessed by all those registered with a GP in the borough.

**Figure 11: Existing Provision of GPs**

Paired LAP areas	GPs	2009 Population*	Population per GP
LAPs 1&2	47.75	64,434	1,349
LAPs 3&4	32.75	53,495	1,633
LAPs 5&6	31.63	50,206	1,587
LAPs 7&8	45.35	66,838	1,474
<b>Tower Hamlets Total</b>	<b>157.48</b>	<b>234,974</b>	<b>1,492</b>

\* This reflects the GLA Population Projections - Low for 2009 (2008 Round)

### 3.1.18 Future Required Provision of GPs



- 3.1.19 This considers the additional requirement for healthcare, (measured in terms of full time equivalent GPs), associated with the population growth estimated as a result of new development in Tower Hamlets to 2025.
- 3.1.20 Calculations are based on existing levels of provision, and present the additional requirements based on the target of 1,800 people per GP, required to meet the estimated population growth generated by the new residential development. These show the anticipated additional GP requirements under both the lower density and higher density development scenarios.

**Figure 12: Healthcare Requirements by Paired LAP**

GP Demand	Lower Density			Higher Density		
	2009-2015	2015-2020	2020-2025	2009-2015	2015-2020	2020-2025
LAPs 1&2	2.43	2.69	1.29	2.72	3.58	2.07
LAPs 3&4	0.67	2.45	0.22	0.72	3.03	0.39
LAPs 5&6	3.90	3.71	0.16	4.16	4.91	0.32
LAPs 7&8	7.27	8.56	3.61	7.95	11.54	4.76
<b>Tower Hamlets Total</b>	<b>14.27</b>	<b>17.42</b>	<b>5.28</b>	<b>15.55</b>	<b>23.06</b>	<b>7.55</b>

3.1.21 This analysis suggests a requirement of between 37 and 46 GPs over the lifetime of the Plan, depending on the density of new development. These GP services are delivered through the service arrangements described below.

**3.1.22 What new health services will be required**

3.1.23 The current capital programme is under review as a result of both the new population projections and a change in strategic policy emphasis at a regional level. The current programme is shown in Figure 13 and the committed programmes in this table are unlikely to change significantly. The remaining schemes are less certain as this is predicated partly on housing growth that is yet to be realised. The location of these schemes is based on the assumptions relating to the location of housing growth. It is also not confirmed at this stage, how many GPs each of these new health centres will incorporate. This will need to be determined at the time, taking account of possible changes to the delivery approach and funding availability, though in general they will include 2-5 GPs plus a range of other services and facilities, to be determined on a scheme-by-scheme basis. These facilities will provide provision for both the amount of new GPs needed to serve additional growth (as determined by the results of health planning analysis above), as well as replacement accommodation for existing GPs, plus other services. Those uncommitted schemes also give the flexibility to respond to changing demand, as the analysis determined by the PPC&G Model is updated and monitored.

**3.1.24 Who and how will new health facilities be delivered?**

3.1.25 NHS Tower Hamlets are the responsible body for commissioning primary health care in the Borough. The Council as Planning Authority are a key partner in the delivery of new health facilities and therefore have been working in close cooperation to ensure health planning is embedded into the LDF. This collaboration is designed to ensure maximum intelligence regarding the impact of new development is incorporated into health planning; to identify sites and to pursue development opportunities; and to maximise the potential return for health from planning obligations and other potential funding sources.

### 3.1.26 *Funding Sources*

3.1.27 In terms of implementing and funding schemes, there are four main routes for procurement of new health facilities which NHS Tower Hamlets are engaged.

- Conventional public funding
- Third party redevelopment with another organisation (developer or RSL) who will develop the building and lease to NHS Tower Hamlets.
- Local Improvement Finance Trust – a joint venture with the private sector for the delivery of health services.
- Planning obligations - to date £10 million has been agreed for health contributions, with a further £8 million identified which may also be available for health.

3.1.28 The most appropriate funding and delivery mechanism is selected for new development schemes.

### 3.1.29 *Costs of new facilities*

3.1.30 To date costings have been produced, and funding sources identified, for a number of schemes to which NHS Tower Hamlets are already committed. Details of these, as well as the rationale behind these new services, are shown in Figure 13.

3.1.31 It is not felt appropriate to identify detailed costings for other schemes as the timing; location and specification of these schemes are too undefined at this stage to be able to identify robust costs. Potential funding streams have been identified however, along with a contingency plan if these funding sources cannot be accessed when required.

3.1.32 Costs and funding sources will be monitored and updated alongside the monitoring of the PPC&G Model, to ensure a coordinated capital plan is produced which relates to development and growth.

3.1.33 Revenue costs also need to be considered as there is time lag between the additional new population taking up residence and the revenue resource required to meet their needs being included in the NHS funding formula.

### 3.1.34 *Risks and contingencies:*

3.1.35 Despite the requirement to plan health services across a long time period - ten years for the Improving Health and Wellbeing Plan - funding mechanisms are often revised and change. Therefore a long term planning will have an element of uncertainty to it, and so regular monitoring of the capital strategy against potential sources of finance is required. The capital strategy has to retain the flexibility to alter the model of service delivery should sources of funding be at risk.

3.1.36 NHS Tower Hamlets is funded through a central formula in which a substantial driver is population change. However, this does not take into account housing development. Thus there will be a risk of a serious funding shortfall, which has been raised with NHS London. There are also risks in terms of delays in the release of Planning obligations – this risk will be managed through close liaison with LBTH.

3.1.37 The contingency against these risks is to review the number and configuration of new schemes, and review where new facilities are needed against the need to provide for new population growth and where they are as replacement for existing premises. A risk to funding sources would also trigger the need to pursue other funding options.

### **3.1.38 *Where and when will facilities be delivered?***

3.1.39 NHS Tower Hamlets recognises the focus within the Core Strategy on the importance of the town centres as the most appropriate location for facilities and services. This has implications on the positioning of new primary health services, which can become themselves a tool of regeneration and an important part of town centres.

3.1.40 The timing, distribution and funding of new health services is shown in the figure below.

Figure 13: Health Infrastructure Schedule

Locality	Place	Scheme name (if known)	Rationale	Premises Costs	Funding sources	Service Costs	Funding sources	Target Completion date
<b>Committed Schemes</b>								
South East	Millwall	Docklands Medical Centre	Population and service growth	Under negotiation	GP Capital	£12.1m recurrent	PCT Revenue	End 2009
North West	Bethnal Green	Bethnal Green Health Centre refurbishment	Premises upgrade, service change and population growth	£3.8m non-recurrent £50k recurrent	PCT Capital	£8m recurrent	PCT Revenue	End 2009
North West	Bethnal Green	Dunbridge Street	Population growth and service developments	£370k recurrent £1.9m non-recurrent	S106 and PCT Revenue	£12m recurrent	PCT Revenue	Mid 2010
South East	Poplar	Newby Place	Premises upgrade, service developments and population growth	£1,000k recurrent £500k non-recurrent	PCT Revenue	£10m recurrent	PCT Revenue	Early 2011
North East	Bromley by Bow	St Andrew's	Population growth and service developments	£700k recurrent £5m non-recurrent	S106 and PCT Revenue	£31m recurrent	PCT Revenue	End 2010
<b>Priority Schemes</b>								
South West	Stepney	Harford Street	Premises upgrade, service developments and population growth	£500k recurrent £4.5m non-recurrent	S106 and PCT Revenue	£7.2m recurrent	PCT Revenue	Mid 2010
North East	Bow Common	Bow Common [Ryans Yard]	Premises upgrade, service	£2.2m recurrent	PCT Revenue	£15.5m recurrent	PCT Revenue	2011
North West	Mile End	Mile End	Population growth and service developments	£1.9m recurrent £1m non-recurrent	PCT Revenue	£24m recurrent	PCT Revenue	2013
<b>Other Schemes</b>								
				<b>Estimated Sq metre (gross internal)</b>	<b>Estimated Annual Premises costs (including pass through)</b>		<b>Fit out costs (assuming shell and core premises)</b>	
<b>North West</b>	Globe Town Shoreditch / Bethnal Green			<b>5000</b>	<b>£</b>	<b>1,883,700</b>	<b>£</b>	<b>10,500,000</b>
<b>North East</b>	Mile End East/ Bow Fish Island			<b>3500</b>	<b>£</b>	<b>1,318,590</b>	<b>£</b>	<b>7,350,000</b>
<b>South West</b>	Wapping Whitechapel Aldgate St Dunstons/ Stepney Green			<b>8800</b>	<b>£</b>	<b>3,315,312</b>	<b>£</b>	<b>18,480,000</b>
<b>South East</b>	Cubitt Town / Millwall Canary Wharf Limehouse / Poplar Poplar Riverside			<b>10000</b>	<b>£</b>	<b>3,767,400</b>	<b>£</b>	<b>21,000,000</b>

#### Notes

1. Recurrent costs mean the annual cost of provision (either service or rents)
2. Non-Recurrent - reflect the one-off costs of construction or fit out
3. Service costs are based on a £1944.00 per head of population. We have excluded £15.5m annual commissioning costs so the costs that these costs reflect the provision of health services and not the management costs to procure these
4. Committed schemes are those that the PCT has committed to whilst priority scheme reflect those that don't have legal obligations to the PCT but which are seen as a priority for delivery
5. Other schemes are identified within the current IHWB programme but will be subject to refresh of the IHWB capital plan - in terms of affordability and need
6. Service costs are reflective of GP list size predicted growth and also include where appropriate the provision of a new dental service or pharmacy
7. Premises costs are a mix of recurrent (rent etc) and non-recurrent construction related costs.
8. Other scheme costs reflect only premises related costs as its too early to identify service costs

## **3.2 Acute Care**

- 3.2.1 In terms of acute (hospital-based) healthcare, Tower Hamlets is within the Barts and the Royal London NHS Trust, which also serves the City of London and large parts of the Thames Gateway. The NHS Trust includes the Royal London Hospital, the St. Bartholomew's Hospital, and the London Chest Hospital.
- 3.2.2 A significant programme of investment is underway to ensure that the Trust provides for the health needs of the population of East London between now and 2016. This led to the New Hospitals Programme<sup>10</sup> and in turn the investment into St. Barts and the Royal London. The Trust has based its future activity assessments on the housing and population figures suggested by the London Plan, which in turn determined the capacity to be provided in the new hospital development at St. Barts. More detail in relation to this capacity planning process is provided in the NHS Trust New Hospitals Programme.
- 3.2.3 The hospital investment programme also took into account the specific health needs of its catchment area, alongside need purely driven by the growth in population. There are also strategic or top down factors which led to shaping the way acute care services should be delivered by the Trust. These three sets of factors led to a programme of dual investment both in the St. Barts and Royal London Hospitals.
- 3.2.4 These combined redevelopments will provide over 1,200 beds for the people of Tower Hamlets, the City of London and the wider East London health economy (though some of these beds will be 'mothballed' for the time being, allowing them to be progressed at a later stage should they need to be supplied for further population increases). This will be delivered through a Private Finance Initiative (PFI). Construction is underway on the redevelopment, with completion expected to be in 2016. This totalled a capital build cost of just over £1bn.

## 4 Education

4.1.1 The London Borough of Tower Hamlets as the Local Authority has a duty to provide statutory school places. School places are coming under increased pressure due to high levels of housing growth and a rising birth rate.

4.1.2 The Council has developed a robust methodology for planning for schools places, to be delivered through its capital plans (The Building Schools for the Future<sup>11</sup> and Primary Strategy for Change<sup>12</sup> programmes), the Core Strategy and subsequent DPDs. This planning process will be regularly updated and monitored to ensure school place planning relates to population growth and change.

### 4.2 Primary and Secondary Education

#### 4.2.1 *Why? – Pupil projections and the planning for new school places*

4.2.2 Accurate projections for new school places are needed to input into the planning process, and the funding process for school places as monitored by the Department for Children, Schools and Families (DCSF).

4.2.3 In order to fulfil its duty to provide sufficient school places the Local Authority has adopted a projection methodology known as the Pupil Place Planning methodology. This has been kept under review and has been updated over time to reflect changing circumstances and trends. Most recently, it has been refreshed to reflect the increasing scale of housing development locally and the rising birth rate. The LA has worked with partner organisations to develop a Planning for Population Change and Growth Model that can be used by all providers of services to the community. The LA will continue to review projection models for both school pupils and the overall population. The PPC&G Model allows varying growth scenarios to be tested.

4.2.4 The projection methodology incorporates:

- Actual birth data and birth rate projections
- Cohort survival rates
- Child yields assumptions for new housing development variable for tenure and size of unit
- Rate of new housing developments
- Considerations regarding cross borough movements

4.2.5 The LA has recently reviewed assumptions about the rate of new housing developments coming forward and taken account of this in the projection methodology.

4.2.6 At the time of writing, the need for new school places as determined by the PPC&G Model is shown in Figure 14 to Figure 16 below. The capacity assessment considers the implications of the expected

population change on demand for education services. It considers the demand and supply of early years facilities, primary schools and secondary schools. Existing capacity within primary and secondary schools across Tower Hamlets is expressed in terms of forms of entry. For primary schools, a form of entry is made up of 210 children, that is, 30 children per class for seven year groups. For secondary schools, a form of entry is made up of 150 children, that is, 30 children per class for five year groups. These are approximate figures adopted for social infrastructure testing purposes. Capacity information for early years is not available at the time of writing.

4.2.7 For each form of entry of primary provision, the LA will provide a nursery class for education of 3-4 years old children.

4.2.8 At March 2009, surplus capacity comprised of:

**Figure 14: Surplus Capacity 2009 - Education**

Paired LAP areas	Surplus Capacity	
	Primary Form Entries	Secondary Form Entries
LAPs 1 & 2	4.17	2.03
LAPs 3 & 4	1.27	0.31
LAPs 5 & 6	-0.37	2.76
LAPs 7 & 8	1.2	0.97
<b>Tower Hamlets Total</b>	<b>6.27</b>	<b>6.07</b>

4.2.9 The figures show some capacity across Tower Hamlets in primary schools. However, this capacity is spread across year groups and does not indicate surplus in places for the admission year (reception year). As the birth rate is rising, the LA has to plan for expanding provision from admission year upwards.

4.2.10 In terms of secondary school places, there is very little surplus capacity in LAPs 3 & 4, some capacity in LAPs 7 & 8, and reasonable capacity in LAPs 1 & 2 and LAPs 5 & 6.

4.2.11 The number of primary and secondary school places required to meet the estimated population growth generated by increased population due to natural change and the new residential developments are shown on Figure 15 and Figure 16 below. These show the anticipated education requirements under both the lower density and higher density development scenarios.

4.2.12 The extra provision that needs to be planned for needs to take into account the existing surplus shown above and the extra requirements shown below.



Figure 15: Primary School Requirements by Paired LAP

Primary School Form Entry Demand	Lower Density			Higher Density		
	2009-2015	2015-2020	2020-2025	2009-2015	2015-2020	2020-2025
LAPs 1&2	-2.38	2.54	-0.10	-2.19	3.13	0.41
LAPs 3&4	-0.03	1.49	-0.70	0.00	1.87	-0.58
LAPs 5&6	3.26	2.04	-1.63	3.44	2.84	-1.52
LAPs 7&8	5.20	5.22	1.12	5.65	7.19	1.88
<b>Tower Hamlets Total</b>	<b>6.05</b>	<b>11.30</b>	<b>-1.31</b>	<b>6.89</b>	<b>15.02</b>	<b>0.19</b>

Figure 16: Secondary School Requirements by Paired LAP

Secondary School Form Entry Demand	Lower Density			Higher Density		
	2009-2015	2015-2020	2020-2025	2009-2015	2015-2020	2020-2025
LAPs 1&2	-2.97	1.98	2.02	-2.84	2.40	2.39
LAPs 3&4	-0.37	1.99	0.68	-0.35	2.26	0.76
LAPs 5&6	-0.27	2.02	-0.44	-0.15	2.58	-0.36
LAPs 7&8	1.03	5.36	2.36	1.35	6.76	2.90
<b>Tower Hamlets Total</b>	<b>-2.58</b>	<b>11.35</b>	<b>4.63</b>	<b>-1.98</b>	<b>14.00</b>	<b>5.69</b>

#### 4.2.13 What? – New school provision

4.2.14 As a result of uncertainties in the development market and the timing and quantum of development coming forward, some flexibility has been retained in planning for new schools, planning for excess capacity to allow for these fluctuations in the market, other unforeseen factors and the exercise of parental preference.

#### 4.2.15 Primary

4.2.16 Our current planning assumption is for 8FE of additional places to be provided in the 2015-2020 time period (expected to be by 2017) in addition to the expansion proposals already being implemented which equals four forms of entry. The further expansion of existing schools where feasible will be considered as well as providing new schools. The timing of the availability of new school sites (affected by the slower rate of site development and the opportunity for partnership proposals in conjunction with developers) may mean there is greater emphasis on expanding existing schools where possible. The location at which these additional places need to be provided is also an important issue. The modelling suggests that extra provision is needed in LAPs 5&6 and LAPs 7&8, as a result of both less existing capacity, and higher levels of future provision needed. This needs to be taken into account when

planning for new school places. Work is already being undertaken to review further opportunities for expansion.

#### **4.2.17 Secondary**

4.2.18 The need for 7FE of secondary provision has been identified by 2020 under the higher density scenario, rising to 12.5FE by 2025. This equates to 1 new secondary school.

4.2.19 It is recognised that both Hackney and Newham are in the process of significant investment in new secondary schools, some of which could provide for LBTH children, and vice versa. Historically, Tower Hamlets has always been a net importer of students from these adjacent boroughs, it is anticipated that this may dip in light of the Academies programme in Hackney.

4.2.20 However cross-borough movements are traditionally low, and accessibility, especially to Newham, is difficult (though it is recognised this will improve over time).

4.2.21 Taking into account the projected need, and a percentage retention of students from those boroughs that have historically exported students to Tower Hamlets, we are still planning to provide for a new secondary school, whilst building in the flexibility in our projections and planning process to respond to new out-of-borough provision. Part of this new site provision is aiming to address unsatisfactory provision elsewhere (i.e. another school is unable to expand).

#### **4.2.22 Funding and Delivery**

##### *4.2.23 Funding Sources and Costs*

4.2.24 For **Primary and nursery**, the delivery method and funding source is through the Primary Capital Programme, plus other DCSF capital funding and developer contributions. Projects will be delivered by the LA using suitable delivery methods.

4.2.25 Indicative costs for new primary provision is as follows:

- New build primary school (2FE) with external space - £5.164m-£7.064m
- New build primary school (2FE) without external space - £5m-£6.9m
- Extension to existing primary school (for an additional 1FE) - £3.175m-£4.3m
- Refurbishment and extension of existing primary school (for an additional 1FE) - £2.9m-£5.25m.

4.2.26 Detail regarding these costs and the assumptions on which they are based are provided in the Costs Report in Appendix 1.

4.2.27 For **secondary** provision, the Building Schools for the Future Programme is the delivery and funding method - currently £37.7 million

of funding has been identified and ring-fenced to provide for a new 8FE secondary school in the Borough<sup>13</sup>.

#### *4.2.28 Risks*

4.2.29 Risks in relation to school provision are in three main areas, firstly regarding funding, secondly regarding the demand on places, and thirdly the availability of sites. Possible risks to the delivery of funding for new school provision include a lower than expected return on planning obligations, or insufficient capital funding from the DCSF. This would require alternative sources of funding to be sought, or alternative ways of providing places would need to be considered, such as extending schools rather than building new schools.

4.2.30 The other main risk is in relation to the demand on school places. The main uncertainties here are the birth rates. These are expected to rise but the rate of increase may be lower or higher than projected, or another assumption is in relation to the projected timescales for when development is to come forward which may prove inaccurate. For this reason, more capacity has been planned for than has currently been projected, to provide contingency for these risks.

4.2.31 To mitigate the risk in relation to the demand for places, the housing completions and projections emerging from the PPC&G Model need to be kept under review, which will feed into school planning decisions.

4.2.32 In relation to funding risks, the identification of other funding sources may be required should current sources of funding be at risk. Another contingency position is to review the balance between expansion rather than new provision to provide for new places, which may require less capital funding. The Council is currently considering expansions to existing schools as a priority.

#### ***4.2.33 Where? The location of new schools.***

4.2.34 In terms of the general principles of locating **primary schools**, they have relatively local catchments so the location of primary schools needs to have a close relationship to areas of need. The highest concentrations of development are in the eastern areas of the Borough, with the PPC&G model predicting over half of future requirements are needed in LAPs 7&8. The Core Strategy has therefore included place-based policies identifying primary schools for the following locations: Bromley by Bow, Poplar Riverside, Isle of Dogs and Fish Island. Specific locations for new primary schools will be identified through the Site and Place Making DPD.

4.2.35 **Secondary schools** have larger catchments areas and so can be more flexible in location. However we are trying to secure a more even spread of provision for our students whilst acknowledging that they are able to and do travel further to school at secondary level, so location is determined by areas of need as well as by the availability of sites,

given their demand for space. Taking both these factors into consideration has led to proposing the area of search for a secondary school to be in the east of the Borough. To this end the Core Strategy has identified areas of search for a new secondary school at Fish Island, Mile End, and Bromley-by-Bow.

#### **4.2.36 When will new schools be provided?**

4.2.37 The current projections for primary and secondary places are based on current expectations regarding housing delivery as well as birth rates. A process has recently been completed to sense-check delivery rates for new housing to ensure accuracy in relation to delivering school places. The PPG&C model allows us to regularly monitor pupil projections, and feed directly into the infrastructure planning process.

4.2.38 Currently for primary schools, reception place capacity will be exceeded by 2012 and additional capacity will then be required. Work is already underway in order to address the capacity issues which will arise in reception places in 2012 through the current expansion programme. An additional 8FE will be required in the years to 2017.

4.2.39 On current projections, the capacity in secondary schools will be reached by 2014. However the date for providing school places may change, mainly in relation to uncertainties in the housing market which is affecting the delivery timescales of new development. This requires an approach that involves ongoing monitoring to take account of uncertainties regarding delivery of housing.

4.2.40 This monitoring also involves a contingency position which would identify 'triggers' for when school places are needed. This means that for primary schools, the modelling and monitoring process would identify how many new births and new housing units, by LAP (as defined in the Core Strategy) would trigger the requirement for new school places. For secondary schools, this would be how many births/new housing units across the borough are needed to trigger a new school. This would also have to consider the lead-in times for delivering new schools, which can be significant – especially when done through the Building Schools for the Future programme.

### **4.3 Sure Start Children's Centre Provision**

4.3.1 Sure Start children's centre provision has been established to date based on specific government initiatives with dedicated funding. The programme has aimed for children's centres to provide a range of support services with an approximate reach of 800 under-5s per centre. The LA, voluntary sector and other partners, principally health services, provide children's centre services generally on a hub and spoke basis.

- 4.3.2 Nursery education for 3 and 4 year olds is not provided at children's centres but at nursery schools and in nursery classes at primary schools.
- 4.3.3 Planning of new primary school provision will aim to provide for 0-11 years and the primary schools designed accordingly. There is no dedicated government funding anticipated for new children's centre developments therefore this will depend on other funding sources being available.

#### **4.4 Further Education**

- 4.4.1 For Post 16 education the Pupil Place Planning process identified a required growth in school based provision of 850 places by 2017. Post 16 education will, as with secondary provision, be funded through BSF Wave 5, and delivered by the Local Education Partnership (LEP). This will provide 400 places in Morpeth, Oaklands and Swanlea 6<sup>th</sup> Forms and 450 places in Raines Foundation, SJC, Mulberry and Central Foundation, George Greens, Bishop Challoner and the East Collaborative. These projections are to be kept under review and plans may need to be accelerated should demand increase. There are currently no plans by the various higher education providers for additional buildings or infrastructure which are relevant to the Core Strategy.

## 5 Transport and Connectivity

- 5.1.1 Sufficient public transport infrastructure to underpin urban growth is a key principle of sustainable development, and investment to create an efficient, high quality transport network is vital in supporting the levels of housing and employment growth envisaged for Tower Hamlets in the Core Strategy and the London Plan. This will require extra capacity in the transport network alongside other connectivity improvements to make the transport network work efficiently alongside development.
- 5.1.2 Therefore ensuring transport infrastructure is adequate to support development targets is a key part of the Infrastructure Delivery Plan and its subsequent implementation.
- 5.1.3 The Borough is part of a sub-regional partnership with Transport for London (TfL) which ensures that strategic transport infrastructure such as the underground, DLR, national rail and bus network can support the growth targets in the London Plan.
- 5.1.4 Transport infrastructure goes beyond simply providing extra capacity on the public transport network, it is also about improving accessibility for all residents, including by foot, cycle, and interchange between travel modes – especially in areas of intensive growth. This involves investment in interchanges and stations; on the public realm; and on routes linking areas of activity, as well as improvements to the network and exploring opportunities to provide choices in travel modes. This level of investment is led by the Borough.
- 5.1.5 The Core Strategy adopts two main threads of policy in order to achieve its strategic objective in relation to transport (Policy SO19). One is in relation to supporting the creations of a strategic transport network to serve the Borough and its growth (SP11.2), plus other policies which focus on improving interchanges, improving public transport and infrastructure in growth areas, and enabling modal shift away from the car (SP11.1, 3 and 4).
- 5.1.6 The Infrastructure Delivery Plan has therefore identified the key transport infrastructure projects needed to implement these policies. These projects are:
- 1) Strategic (i.e. cross-borough) projects which provide additional capacity on the transport network to ensure the Core Strategy growth targets can be met, and
  - 2) Connectivity projects ('local' - within the borough) which are needed to support the area-based core strategy policies.
- 5.1.7 There is also other transport investment outside these definitions which are related to improving the quality or management of the transport network or encouraging modal shift but are not critical to the

achievement of the Core Strategy objectives, such as minor road and streetscape improvements. Many of these projects are picked up in other delivery documents or strategies.

#### **5.1.8 Why? – The need for transport and connectivity improvements in the Borough**

5.1.9 The rationale for transport infrastructure investment is expressed through the strategic and 'local' dimensions explained above, and are governed by a policy hierarchy from the London/Thames Gateway level, down to a sub-regional/East London level, down to the Borough level.

#### *5.1.10 The Strategic level - Housing and employment growth in East London*

5.1.11 The London Thames Gateway area is a focus for significant growth – the London Plan states that 124,000 homes and 208,000 additional jobs should be planned for by 2026<sup>14</sup>. These figures are currently being revised through the refresh of the London Plan. Sub-regional planning sets the context for this growth in East London, through plans such as the Legacy Master Plan Framework<sup>15</sup> and the forthcoming Olympics SPG. Together these set the main transport challenges which need to be met by ensuring there is sufficient transport capacity and accessibility across the area over this time. This is done through sub-regional transport planning, feeding into the Mayors Transport Strategy<sup>16</sup> and the TfL Business Plan<sup>17</sup>.

5.1.12 The TfL Business Plan to 2017 includes major transport investment in the Thames Gateway through DLR, Crossrail, Underground and National Rail upgrades (all of which are relevant to Tower Hamlets). These funded transport schemes (with the exception of Crossrail) relate to housing/employment growth in the sub-region set in the London Plan between 2001 and 2026.

5.1.13 Strategic transport investment decisions (affecting the East London Boroughs and the Thames Gateway) are led by TfL, with support and engagement with the Boroughs and the Thames Gateway Development Corporation.

5.1.14 Sub-regional planning and modelling is used to demonstrate the current capacity of the public transport network. This helps identify future transport needs against London Plan/Thames Gateway growth targets, which feed into the preparation of the Mayor's Transport Strategy.

5.1.15 This process is ongoing and currently being monitored and updated to ensure the phasing and planning of transport infrastructure is integrated with new planning targets (housing and employment) as they emerge.

### 5.1.16 Local connectivity projects

5.1.17 Transport and connectivity investment is also needed in order to respond to the quantum and location of growth in Tower Hamlets and facilitate the various development projects identified in the Core Strategy which are being progressed through various Master Plans across key growth areas and development sites.

5.1.18 These locations are those where the majority of growth is focused and therefore new connectivity infrastructure may be needed to allow people easy movement between homes, jobs, services and facilities. The Core Strategy identifies that transport and connectivity infrastructure is needed in the following areas to enable and create sustainable development:

- Fish Island / Hackney Wick (through the Hackney Wick/Fish Island Master Plan)
- Whitechapel (through the Whitechapel Master Plan)
- Bromley-by-Bow Master Plan (through the Bromley-by-Bow Master Plan)
- Aldgate Master Plan (through the Aldgate Master Plan)
- Poplar Riverside (through delivery processes with other partners)
- Millennium Quarter (through the Millennium Quarter Master Plan)
- Lower Lee Valley (through the Legacy Master Plan Framework)
- Lea River Park (led by LTGDC)

5.1.19 These plans will include more detailed information regarding the various transport and connectivity requirements attached to each project. Presently these plans are at various levels of development at various timescales, and therefore the specific transport and connectivity elements within them have not been fully defined, and therefore not fully costed at this stage. We have included project details such as costs and funding sources where it is appropriate to do so, i.e. where feasibility work has been undertaken. This feasibility and costings work will be updated through the review of the IDP.

5.1.20 There are also a range of other schemes throughout the Borough which are less critical in terms of delivering development but recognised as being able to improve the overall level of connectivity and the efficiency of the transport network (public transport and the road network) within and outside the Borough boundaries. These are included in the current Local Implementation Plan<sup>18</sup> and are costed projects to which the Borough applies for funding from TfL. The LIP process operates on a 3-5 year rolling programme, the current plan runs to 2010/11, with the next to 2015/2016.



### **5.1.21 What transport infrastructure is needed to support this growth?**

#### *5.1.22 Strategic Transport Investment*

5.1.23 Sub-regional transport modelling identifies where on the network expansion is needed. A new sub-regional model for East London is being prepared, and will be complete in 2010. The outputs of this model will inform the Sub-Regional Transport Framework (forthcoming) for East London. This modelling is considered alongside where connections should be made, for example between new areas of housing growth and locations for employment. This is the process which will identify new strategic level transport investment to 2031, beyond the current Mayor's Transport Strategy and TfL Business Plan which currently runs to 2016.

5.1.24 Capacity in the system has already been planned to 2016, subject to identified improvements. The following transport schemes have been identified as being required to support growth between now and 2016, of which many of have already secured funding or have begun construction. Fully funded strategic transport schemes include:

- Crossrail – 2017 (not fully funded – funding to be addressed through the Crossrail SPG, indicating how a proportion of funding will come from planning obligations)
- East London Line, due for completion in 2010
- Central Line upgrade - 2011
- District Line upgrade – 2016/2017
- DLR 3 car upgrade: Bank to Lewisham – 2009
- DLR 3 car upgrade: Poplar to Woolwich
- DLR to Stratford International – 2010

5.1.25 These are the transport schemes that relate to Tower Hamlets. It is the combination of these schemes that provide the increase in capacity of the transport network needed to allow for growth targets in housing and employment set through the London Plan figures, London Thames Gateway priorities, and the Tower Hamlets Core Strategy.

5.1.26 These schemes are delivered by TfL and are funded through the Mayor's Transport Budget and central government funding, plus developer contributions where relevant, and are intended to support levels of growth between now and 2016. The arrangements for funding of Crossrail via developer contributions is currently being consulted on through the Crossrail SPG<sup>19</sup>.

5.1.27 There are also other strategic transport schemes which are not currently approved for funding, but are being considered at the sub-regional level by the Borough and TfL, which may be supported for inclusion in the next Mayor's Transport Strategy:

- Congestion solutions for the A12. A study is currently being prepared which examines ways in which the capacity problems currently facing the

A12 can be tackled, as well as mitigating the severance caused by the A12, which may unlock development sites

- New transit solutions to solve over-capacity on the route 25 (Ilford to Oxford Circus)
- Sustrans walking & cycling bridge or shuttle ferry (Isle of dogs to Rotherhithe)
- TfL River Crossing - Wood Wharf to North Greenwich shuttle ferry or fixed link)

5.1.28 More detail for these schemes in terms of potential benefits, costs, and further design and specification will be progressed through the East London and Thames Gateway Sub-Regional Review, which includes TfL, the Borough and the London Thames Gateway Development Corporation.

#### 5.1.29 *Local connectivity investment*

5.1.30 In addition to these schemes, which provide sufficient capacity in the transport network, there are a series of schemes within the Borough which are needed to ensure an accessible, high quality, sustainable and integrated transport network is provided to underpin the Core Strategy. This includes improvements to stations, public realm investment, and connectivity improvements to walking, cycling or pedestrian routes, bridges and crossings.

5.1.31 This is to be achieved through a series of projects, identified through Core Strategy policies and formulated through master plans or development schemes. These are focused around creating high quality public transport interchanges in centres and improved connectivity between areas of existing activity, especially in areas of growth and new development.

5.1.32 These projects are:

- *Hackney Wick / Fish Island*: The Master Plan will include large-scale interchange improvements to the Hackney Wick Station, as well as connectivity improvements to link the eastern parts of the Borough to the Olympic Park and regeneration of Stratford and Stratford City, via new bridges and connections from Fish Island. A delivery and implementation plan will accompany the Master Plan.
- *Whitechapel Interchange project*. This will improve the quality of the public realm and pedestrian connectivity between Whitechapel Station (Crossrail, East London Line, Underground), the High Street, the market, and the Royal London Hospital. This will be delivered through the Whitechapel Master Plan.
- *Bromley-by-Bow station upgrade*. Improve the Bromley-by-Bow underground station in order to improve and integrate access to street level and access across the A12. This will be delivered through the Bromley-by-Bow Master Plan Land Use and Design Brief and related implementation documents.

- *Bow A12 crossings.* Improve connections between Bow and Fish Island across the A12, and beyond Fish Island to the Olympic Park and a regenerated Stratford. These crossings are to be brought forward through the Hackney Wick / Fish Island Master Plan and Legacy Master Plan Framework.
- *Poplar Riverside A12 crossing and connections.* To mitigate the impact of the A12 and improve accessibility between Poplar Riverside and surrounding communities. These are to be brought forward with partners through further delivery processes led by LTGDC.
- *A12 Study:* Pedestrian enhancements, junction improvements and traffic management initiatives to improve the efficiency of the A12 and reduce the severance impact it has on communities to the west and east, potentially freeing up development potential.
- *Millennium Quarter:* new and improved transport infrastructure, public realm, highways and connectivity works to enable new commercial and residential development around Millennium Quarter, delivered using a Section 106 agreement from the development.
- *High Street 2012 Project:* a set of linked projects and programmes including overall street improvements and area based initiatives to improve and regenerate the route from the City, through Tower Hamlets, to Stratford and the Olympic sites.
- *Aspen Way:* Working towards reducing the severance between Canary Wharf and South Poplar through connecting across Aspen Way. The brief for a Master Plan is to be prepared in 2009/2010.

#### 5.1.33 Other transport investment

5.1.34 There are a series of other schemes which are being progressed by the Borough with TfL. These are less critical to enabling growth, but important in achieving targets relating to modal shift and less reliance on the private car. These include:

- *Electric Vehicle Infrastructure* – part of the Mayor of London's electric Vehicle Delivery Plan
- *On-Street Community Car Clubs* – currently in the Mayor's Transport Strategy Statement of Intent document to be implemented by TfL, LBTH, and private operators.
- *TfL Cycle Hire Scheme* – Phase 2 of the scheme (TfL Fare Zones 2 and 3) is in the Mayor's Transport Strategy Statement of Intent document.
- *New River Thames Piers* – to facilitate better use of the River as a mode of transport, currently being developed through the TfL River Crossing Study.

5.1.35 There is also a costed programme of local transport projects within the Council's Local Implementation Plan to be delivered on a rolling programme, with the current programme running to 2011 and the next between 2012 and 2015. These projects are focused on streetscene, road safety, prioritising cycling, walking and public transport as an

active mode of travel, and controlling the impact of traffic in local areas and keeping essential networks flowing. These projects are partly funded through allocated TfL capital funds, matched by other sources including planning obligations.

5.1.36 Looking into the longer term, there are a series of other projects which are embryonic in terms of their specification but are regarded as significant in improving local connectivity. As these projects are aspirational, they do not have identified funding sources ring-fenced for them, nor do they have costs attached at this stage. They are highlighted as they are to be considered for the next round of LIP funding or other sources. These projects include:

- Limehouse interchange project
- Roman road town centre improvements
- Shadwell Station Improvements
- Bethnal Green National Rail station upgrades
- Cambridge Heath National Rail station upgrades

### **5.1.37 Delivering Transport Infrastructure**

#### *5.1.38 Strategic Transport Investment*

5.1.39 To ensure a coherent, well planned programme of transport investment supports the ambitious levels of growth set across East London, a partnership approach has been established. This has been designed to ensure this is coordinated across all organisations including the relevant London Boroughs, The London Thames Gateway Development Corporation and Transport for London.

5.1.40 This partnership will produce an East London Sub-Regional Transport Strategy. This will outline how TfL's capital spending will support growth in the sub-region to 2016 (the current end-date for the Mayors Transport Strategy) and through to 2031. New modelling tools will be used to test future patterns of growth and accessibility. This will identify transport priorities, including the potential for new schemes as well as building on current investment such as DLR and Crossrail, leading into a proposed programme of transport investment matched by a phased programme of developments. This work will also be used in lobbying central government for support and funding.

5.1.41 This is the mechanism that will progress and monitor the strategic transport infrastructure needed to underpin growth. Outputs of this process will inform the monitoring and amendments to the IDP.

#### *5.1.42 Connectivity Projects*

5.1.43 The connectivity projects rely on various funding sources and have differing delivery timescales, as they are often linked to specific developments or master plans.

5.1.44 The monitoring, implementation and funding allocation for these projects is led by LBTH through the Major Projects Section. The current situation regarding costs and funding sources for these projects is included below. Each scheme has an Implementation Plan attached to it, which continually sets milestones for delivery, highlights high level risks against its implementation, and works with partners including developers to ensure projects objectives are met.

5.1.45 Whilst a number of projects have been costed, it may not be possible or it may be inappropriate to provide costings for other projects at this stage. This may be because some projects may not be sufficiently developed in their specification or design. As such any costings attached to it may not be accurate. Furthermore the project may be tied to a particular development or timescale which is currently in flux, and therefore a robust costing of it will not be suitable. In these cases we have indicated the process by which costings will be identified (to be updated as the IDP is monitored), alongside funding sources, risks to these funding sources, and the contingency position.

**Figure 17: Connectivity Projects Delivery Schedule**

<b>Scheme</b>	<b>Target Date</b>	<b>Cost or approach to costing</b>	<b>Funding Source</b>
Hackney Wick / Fish Island	2020	Detailed feasibility Study for new Station, public realm upgrades, and connectivity to the rest of fish Island to be commissioned in 2009.	LBTH / LBH / LTGDC / TfL /
Whitechapel Interchange project and associated public realm improvements.	2017	New Crossrail Station funded through Crossrail. Feasibility of interchange between Tube/ELL with Crossrail to be confirmed, funding and costs yet to be identified. Public realm/junction works funded through High Street 2012 (£3.7m).	Crossrail / TfL / Planning obligations / High Street 2012
Bromley-by-Bow station upgrade	2020	£68-105m for station upgrades/replacement <sup>20</sup> . More detailed costs to follow in 2009 through further design and feasibility work.	Planning Obligations, LTGDC / TfL / LBTH
Bow A12 crossings / Poplar Riverside A12 crossings and connections / A12 Study interventions	2012 - 2020	Includes various projects at various stages of feasibility testing. £13.2m of potential project costs identified to date. Outline costs for the remainder of the projects fall in to 'Low' (up to £0.5m), 'Med.' (£0.5-2m), 'High' (£2-5m) and 'Very High' (£5m+) categories <sup>21</sup> . Individual projects are being progressed through various mechanisms including the	TfL, LTGDC, LBTH, Planning obligations.

		LMF, the Fish Island Master Plan, TfL, Bromley-by-Bow Masterplan, LTGDC, LBTH and LB Newham, and are subject to further feasibility testing and project specification.	
Millennium Quarter	2015	£27.7m transport and infrastructure costs (2002 prices) for station improvements and associated highway and public realm works <sup>22</sup> .	S106 funding from Millennium Quarter developments.
St. Paul's Way transformational project	2015	Initially £1m of highway and streetscape investment <sup>23</sup> . £500k of which has so far been identified.	Planning obligations and discussions with TfL to match-fund through area-based funding. Capital funding may be available if Mayors Great Spaces Initiative bid is successful.
Aspen Way Connections	2020	Brief for Aspen Way Master Plan to be prepared in 2010. Specification of project yet to be defined, but is expected to have significant costs.	Project has support from LBTH, Canary Wharf Group, also seeking support from TfL and HCA.
Leamouth Pedestrian/Cycle Bridge	2015	£8m (cost taken from LIP)	Funded through the regeneration of the Leamouth Peninsula.
Local Projects	2012, part of a 3-5 year rolling programme.	£3-4m per year through capital allocations, with match funding identified from other sources.	Various (including Borough Spending Plans, ODPM, Developer, TfL, planning obligations, DfT, Borough)

## **6 Utilities, Waste & Flooding**

### **6.1 Electricity and Gas supplies**

#### **6.1.1 *The provision of electricity and gas***

6.1.2 National Grid has a statutory duty to develop and maintain an efficient and coordinated transmission system of electricity and gas. It owns and maintains the network and provides electricity supply from generating stations to local distribution companies, and also owns and operates the high pressure gas transmission in England, Scotland and Wales.

6.1.3 New gas infrastructure developments are periodically required to meet increases in demand and changes in patterns of supply. Generally, network developments requiring additional capacity which may be viewed as a result of increased demand are actually as a result of overall demand growth in a region rather than site specific developments.

6.1.4 To ensure that an adequate supply of electricity and gas is provided, and that the location of national grid infrastructure is considered when planning development, National Grid are consulted on during the preparation of Development Plan Documents, and have been contacted as part of the consultation on the Core Strategy and developing the IDP. This gives National Grid the opportunity to comment on and subsequently plan for the quantum and broad location of development in the Borough over a 10-25 time period, and provides the opportunity to state the impact of this proposed development on National Grid assets and their capacity to provide electricity and gas. As part of this liaison between the Borough as planners and infrastructure providers, communication is maintained to allow National Grid the maximum opportunity to respond to development scenarios and plan accordingly. The method for this is addressed below.

#### **6.1.5 *Capacity requirements***

6.1.6 In addition to the consultation on the Core Strategy, LBTH has previously commissioned a utilities study to examine infrastructure capacities in relation to the Area Action Plans produced in 2005/06<sup>24</sup>. Although the study was completed over three years ago, the broad growth targets which the study considered (up to 39,000 new homes from 2006-2016 and 138,500 jobs to 2016) are broadly comparable to the growth targets in the Core Strategy (43,000 homes from 2010 to 2025), and therefore the capacity of the infrastructure that the study considered can be used to inform the current infrastructure planning.

#### **6.1.7 *Electricity***

6.1.8 The study identified that there is sufficient capacity for current demand, though there isn't the capacity within the existing networks to provide for the growth levels envisaged. Existing substations would require

upgrading in Bow, West Ham, and it is likely that a new sub-station will be required to support the levels of growth envisaged in the Isle of Dogs area.

#### **6.1.9 Gas**

6.1.10 The Utilities study also examined capacity in the Gas network, which suggested that there is sufficient capacity in the gas infrastructure to allow for the growth targets in the Leaside and City-Fringe areas. There were some capacity concerns for the Isle of Dogs area, where some local infrastructure works may be required to achieve the quantum of growth envisaged. This improvement work however will be addressed through the site-specific planning of the Isle of Dogs when it is necessary, as it is not of the scale which needs to be addressed by the Core Strategy and the IDP.

#### **6.1.11 Monitoring and upgrading**

6.1.12 Monitoring arrangements between the Council and National Grid exist at a number of levels, and are established and robust enough to ensure that infrastructure providers are notified of development proposals in sufficient time to allow them to react and plan new supply.

6.1.13 These channels of communication exist at the strategic level through consultation on DPD documents, and at a more local level through the development planning process, where developers inform providers of development capacities so local adjustments can be made.

6.1.14 The IDP and PPC&G Model will provide further means to improve the monitoring arrangements in place between gas and electricity suppliers and the Council. The IDP and the PPC&G Model can provide regular reports and updates to National Grid providing them with reliable, up to date population and housing growth projections, provided at a suitable geography, which can inform their capacity planning decisions.

## **6.2 Water**

6.2.1 Thames Water is the statutory body for providing the Borough with a clean, safe supply of drinking water, to deal with waste water, and to manage the sewerage system. As part of meeting these statutory outcomes Thames Water must consider and accommodate the growth in demand for its services.

6.2.2 This has been done through involving Thames Water in the preparation of the LDF and the Core Strategy to identify likely locations and scales of growth through Development Plan allocations. This was done through their representations on the Core Strategy, and through liaison in the preparation of this IDP. Thames Water has therefore identified what infrastructure projects are needed to fulfil their statutory obligations over the plan period. Thames Water then responds through incorporating these development scenarios into its business planning



process, on which the Water regulator OFWAT decides the level of funding Thames Water receives to implement their capital programme.

6.2.3 There is also engagement between Thames Water and the GLA on the London Plan. This process addresses policy regarding the supply and maintenance of the drinking and waste water infrastructure, including support for strategic projects such as the Upper Thames Reservoir (needed to supply London in the long term) and the Sludge Strategy, which addresses sewage management in the medium and long term.

6.2.4 This Capital Programme runs on five-yearly cycles. The current management period is due to end in 2009, with the Business Plan for the next period, running to 2015, currently being drafted. This Business Plan identifies a number of key infrastructure projects which will be progressed by Thames Water to ensure it can continue to provide a safe and efficient water supply and sewerage network to Tower Hamlets in the period 2010-2015.

6.2.5 The Planned Capital Programme (2010 to 2015)<sup>25</sup> projects in Tower Hamlets are as follows:

#### 6.2.6 *Waste Water*

- The Thames Tideway Sewer Tunnel project. This is to reduce pollution from the Beckton/Crossness sewerage system. This will comprise of a storage and transfer wastewater tunnel from West London to Beckton Sewage Treatment Works, part of which will be located in Tower Hamlets. Some development will be required in the Borough to enable construction and have consulted the Borough on potential locations.
- Cornwall Street, E1 – project to reline a defective combined sewer which will cross the Underground line
- E14 - resolve flooding issues although the solution is not defined at this stage
- E2 - flooding solution. Again, the details of the exact location is not yet determined.

#### 6.2.7 *Clean Water*

- Continuation of the leakage reduction programme via Victorian Mains Replacement (VMR) and capital maintenance of existing water mains. This includes five Victorian mains replacement projects between 2009 and 2010, costing £8m.
- Desalination Plant in the Thames Estuary, continue to plan for a resource in the Upper Thames Valley. Programme of replacement of Victorian mains.

6.2.8 All of these projects are subject to funding being agreed with the regulator Ofwat. The final decision on funding will be made later in 2009. The Borough will monitor the progress of these projects in relation to their implementation and any impacts that the projects will have on the viability or phasing of development, or any requirements in terms of land use planning.

6.2.9 In addition to these larger schemes, there is also an ongoing role of monitoring capacity through the development process. Thames Water is reliant on developers demonstrating that adequate capacity exists to serve the development and that it will not lead to problems for other users. This may require developers to undertake appropriate studies to ascertain the impact of the development on existing infrastructure, and if necessary, agree what improvements will need to be made and who will fund them. This is undertaken through the Development Management function of the Council.

### **6.3 Waste**

6.3.1 There is a requirement in international and national policy to move towards more sustainable waste management practices. This will need to involve more re-use, recycling and treatment of waste that extracts more value from waste and minimises the amount that is disposed through landfill.

6.3.2 In order to assess what facilities will be needed in the borough to both deal with its waste and how it is to respond to this new policy context, it produced a Waste Evidence Base Report<sup>26</sup>. This report was prepared as part of the Core Strategy, and provides the policy context in regard to dealing with waste, analyses how much waste will be generated over time, and the what future waste management capacity requirements will be needed to adequately deal with this waste. It also explores how much land would be needed as a result of this, and performs a site assessment process of suitable sites which underpins both the Core Strategy and other parts of the LDF Documents.

#### **6.3.3 Why? – Future waste arising from the Borough**

6.3.4 In terms of predicting how much waste the Borough will have to deal with in the future, this is partly derived from data collected by the Council, and partly from other regional datasets. Waste falls into a number of categories, which include municipal solid waste, commercial and industrial waste, construction and demolition waste and hazardous waste.

6.3.5 The London Plan sets out figures, Borough by Borough, for how much municipal waste will be produced, as well as targets for the amount of waste to be managed by each Borough in order to achieve its aim of increasing the amount of waste managed in London to 80% by 2020. This means that in 2015 and 2020 the Borough will have to manage, and find land for the management of more than its own municipal waste arisings. The Borough is also provided with targets in the London Plan for dealing with commercial and industrial waste. The Waste Evidence Baseline Report provides the detail of this.

6.3.6 In terms of construction and demolition waste, there are no new requirements set out in the London Plan for new facilities in Tower Hamlets, and so the Core Strategy does not need to allocate specific

sites. The amount of hazardous waste produced by the Borough is thought to be negligible in comparison with other waste streams, and therefore the London Plan states that a sub-regional approach should be taken towards its management, and therefore the Core Strategy does not need to allocate specific sites for its management.

6.3.7 Managing its municipal waste arisings whilst also meeting London Plan targets are therefore the key challenges for waste management in the Borough. The next steps outline how it will do this, and what extra waste management capacity will be needed.

### **6.3.8 *What? – Future Waste Management Capacity Arrangements***

6.3.9 National and Regional legislation is placing more emphasis on avoiding landfill as a way of managing waste. The London Plan also provides targets as to how much waste each Borough needs to manage. This means that Tower Hamlets will need to provide new capacity for the recycling, composting and treatment of waste. The Waste Evidence report concluded that Tower Hamlets does not have the required capacity to meet London Plan requirements, and therefore needs to provide such a facility.

6.3.10 There are a number of options in relation to the sizes and arrangements of such facilities. At this stage in the process the exact type, technology and size of facility cannot be identified, as this would depend partly on the technology available, partly determined by the site and site constraints of the chosen location, and partly determined by the contractual arrangements that the Council will enter for waste management. However the study recommended that the Core Strategy should identify sites with a total land area of 5-10 hectares in order to house the facilities with sufficient capacity to manage the waste targets set by the London Plan.

### **6.3.11 *Who and How? – The Waste Management Contract***

6.3.12 At present, Tower Hamlets Municipal Waste is managed through 3 separate contracts. Co-mingled dry recyclate material collected from households and businesses is transferred to a Materials Recovery Facility outside of the borough in Crayford. Separately collected green garden waste is processed at a composting facility in Essex and food waste from households is processed at an In Vessel Composting facility in Kent.

6.3.13 The residual municipal waste is currently being disposed of to a landfill site in Essex. Transport of this waste is through the Council's own Waste Transfer Station at Northumberland Wharf via the River Thames.

6.3.14 The Council intends to commence a procurement process using the Competitive Dialogue procedure, to secure new and more sustainable waste treatment and disposal solutions that will divert significant

quantities of Municipal Waste from landfill, increase the amount of dry recyclate recovered from waste and with the potential to recovery/generate energy. Through this procurement process the Council will be exploring the potential to deliver a proportion of this waste treatment capacity within the borough through a Joint Venture project.

**6.3.15 Potential costs of a new waste facility**

6.3.16 The potential costs for a new waste facility are shown in Figure 18 below. As is explained above, the exact size and specification of the new facility has yet to be determined, and so costs for a range of facilities has been supplied.

**Figure 18: Indicative Waste Facility Costs**

<b>Facility Type</b>	<b>Throughput (thousands tonnes per annum – Ktpa)</b>	<b>Size Requirement (ha)</b>	<b>(£m) Indicative Capital Cost Range</b>
<b>Materials Recovery Facility (MRF)</b>			
Medium	50	1-2	3-6
Small	25	0.8	2.5-4
<b>Mechanical Biological Treatment (MBT)</b>			
Mid Size	155	1.75	12-42
Small	60	1	6-20
<b>Integrated Resource Recovery Park (40ktpa recycling, 30ktpa anaerobic digestion, 80 ktpa gasification)</b>	150	4	30-70
<b>Composting (in vessel)</b>			
Small in vessel composting	5	0.5	0.75-2
Larger in vessel composting	60	2	3-7
<b>Anaerobic Digestion (AD)</b>			
Large	40	0.6	7-13
Small AD	5-10	0.15	3-10
<b>Gasification and Pyrolysis (Advanced Thermal Treatment)</b>			
Large gasification plant (including sorting for recycling 30ktpa)	80	2.4	20-50
Small	40	0.3	10-25
<b>Thermal Treatment (Conventional)</b>			
Large	250	2-5	80-180
Small	50	1-2	20-40

6.3.17 More detail regarding the methodology for these costs can be found in the accompanying costs report at Appendix 1.

**6.3.18 Where? – Potential sites for waste management**

6.3.19 The Waste Evidence Base Report performed a site assessment process which identified and analysed a long list of potentially suitable sites. This led to a shortlist of suitable sites, on which a more detailed

assessment was performed in relation to its land area, current use and conditions, nearby land uses, relationship with the transport network, biodiversity and other built environment considerations.

6.3.20 This led to the identification of a number of preferred sites suitable for the location of a new waste management facility which will allow the Borough to achieve its waste management targets set between now and 2020. These sites, also identified in the Core Strategy, are within the following areas of search:

- Poplar Riverside
- Bromley-by-Bow
- Fish island

#### **6.3.21 When?**

6.3.22 The Council's current reliance on landfill disposal for residual waste is now putting significant pressure on budgets and it has been estimated that by 2011/12 the increased cost of the Landfill Tax will cause a budget deficit.

6.3.23 The Council's current contractual arrangements for waste treatment and disposal run until 31<sup>st</sup> December 2013 therefore with effect from 1<sup>st</sup> January 2014 the Council must have alternative waste treatment and disposal arrangements in place, at the very latest.

6.3.24 The Council anticipates that the procurement process will commence on November 2009 and is currently looking to be in a position to award a new contract at the end of 2011. Achieving an award of contract at this time would allow a period of 2 years for planning approval to be obtained and construction and commissioning of any new facility to be achieved.

## **6.4 Flooding**

6.4.1 Preventing and mitigating flooding can involve a range of interventions from mitigation measures such as flood defences, through to much longer term prevention measures such as ensuring efficient drainage systems are adopted as part of new development.

6.4.2 The main policy documents which provides the strategic guidance for the Borough's response to flood risk is the Strategic Flood Risk Assessment<sup>27</sup> and The Environment Agency TE2100 Plan<sup>28</sup>. The Borough's Strategic Flood Risk Assessment is a key document in assessing areas of risk of flooding, and how this risk can be managed. It feeds into the Core Strategy, influencing strategic decisions regarding the location of growth, as well as specific policies such as those relating to building design. The Environment Agency TE2100 Plan sets out the Environment Agency's recommendations for flood risk management over the next century.

- 6.4.3 The Environment Agency has a supervisory role over all flood defences, as well as an important role in coordinating flood mitigation and prevention measures, with the Local Authority also having a role in coordinating and involvement in flood related policy and guidance. Individual landowners are responsible for the specific maintenance of defences within their ownership.
- 6.4.4 In terms of infrastructure, the Borough and the Environment Agency carry out annual inspections of flood defence assets and these inspections are used to inform the owner of their duty to maintain them. Ownership is divided between British Waterways, The Environment Agency, private owners, as well as the Borough. For the purposes of the Infrastructure Plan, we separate those mitigation measures concerned with managing the impacts of flooding with prevention measures, which are largely proactive ways of ensuring any exposure to the impacts of flooding is minimised.

#### **6.4.5 *Flood Mitigation and Prevention***

- 6.4.6 Flood mitigation is essentially about making sure that existing flood defence systems are maintained, and if these are inadequate to provide the level of mitigation required, then, if required, that new defences are planned for. This is done through cooperation between the Borough, the Environment Agency, British Waterways and the Department of the Environment, Food and Agriculture (DEFRA). Flood prevention ensures that development in the Borough suitably adapts to incorporate measures which will mitigate the affects of flood and climate change in the future.
- 6.4.7 The Borough has undertaken a Strategic Flood Risk Assessment, which identifies areas of risk of flooding, the findings of which are used to inform advice and policy on the type and location of development. LBTH is also contributing towards the TE2100 Strategy, which is the flood risk management plan for the Thames Estuary. These documents form the strategic policy context for flood prevention in the Borough. PPS25 also plays an important policy role in reducing the consequences of flooding in the longer term.
- 6.4.8 The TE2100 Strategy's role is to manage the risk of flooding and support and inform the land use planning process. Its findings and recommendations have informed the preparation of the Core Strategy. Development management polices and building regulations also play an important part of adapting the built environment to face these environmental challenges. Planning policy will seek to encourage the use of sustainable urban drainage systems as part of new development.
- 6.4.9 In summary flood prevention and mitigation in the Borough will be managed in the following ways:

- Flood management infrastructure in the Borough includes high earth embankments, flood gates, flood walls, as well as the Thames Barrier. In terms of the need for maintenance or new infrastructure, the TE2100 Report states that there is a programme which seeks to maintain, enhance, improve or replace river defence walls and active structures in the Borough between 2010 and 2034; this will be promoted by the Environment Agency Asset Management Teams, along with individual landowners, developers, and the Council. Any new defences should preferably be built by the riparian owners.
- Through monitoring and managing specific flood defence projects and areas of risk identified by the SFRA the Environment Agency supports the proposal to create open space around Levens Road which will help reduce fluvial/tidal flooding. It will also significantly improve the management of surface water run-off. Specific defence measures may also be required if there is to be significant development at Fish Island. This would require flood defences or compensatory floodplains upstream. Further work or mitigation measures will be required through any master planning processes.
- Using the SFRA, TE2100 work and PPS25 to encourage prevention measures such as SUDS to be adopted in planning policies.
- Using the SFRA and TE2100 to inform longer term flood prevention and mitigation measures. This will be updated and monitored through the monitoring process for the IDP.

## **6.5 Green Infrastructure**

- 6.5.1 Tackling climate change is one of the most important issues facing spatial planning, and enabling green infrastructure which can provide renewable energy is an important way of addressing carbon emissions. The Core Strategy includes targets to reduce carbon emissions, as well as policy promoting decentralised energy through various means.
- 6.5.2 There is significant policy weight behind providing renewable energy, at the national level through various Planning Policy Statements, at regional level through the London Plan, and at local level through the LDF and the Core Strategy.
- 6.5.3 Facilitating projects to generate energy through means such as decentralised heat and energy networks, waste to energy facilities, or facilitating energy generation that can link into sub-regional energy networks, need to be addressed in Infrastructure Planning as well as policy in the Core Strategy. Although many of these projects are currently in their infancy, the framework for developing them can be established in the Core Strategy and IDP, with project updates and more detail provided in the Site and Place Making DPD and the monitoring of the IDP.



#### 6.5.4 *Decentralised Energy Networks*

- 6.5.5 The Borough commissioned a study which examined the potential of various technologies which could help Tower Hamlets achieve its sustainable energy objectives<sup>29</sup>. The study suggested initiatives which range in scale from schemes which can be implemented on individual homes (green roofs), to larger projects which require more significant infrastructure investment (such as Combined Heat and Power networks).
- 6.5.6 Many of these projects can significantly contribute to renewable energy targets and to the reduction of carbon emissions, but their development and implementation are often at the level of individual housing units or development schemes. These do not require infrastructure investment, but do need an effective policy framework to enable them to happen, through both the Core Strategy and subsequent DPDs.
- 6.5.7 However significant growth and change of the scale planned for Tower Hamlets presents the opportunity to implement a new decentralised energy system connected to a growing distribution network. One such project is the Thames Gateway Heat Network. This project uses various existing and new heat sources (waste to energy, surplus industrial processes) to heat water, connected to homes and businesses through a network of pipes providing heat to replace traditional boilers. To facilitate this system, a network of pipes is required to transfer the energy from its source to its destination. The development of this network is in the form of a series of independent local networks that are connected by a main transmission line once demand reaches a point of critical mass.
- 6.5.8 Medium to high density development which is often built in Tower Hamlets is suitable for these localised networks as the energy does not have to travel great distances and efficiency savings are made.
- 6.5.9 The LDA is leading on this work and is currently focusing specifically in the Barking and Dagenham and Newham areas, where the Barking Power Station is being developed as a heat source, and a localised network being developed for Barking town centre.
- 6.5.10 However, in the future the project aims to develop westwards, introducing localised networks in Tower Hamlets. There are therefore no specific infrastructure requirements relating to this heat network at the current stage. To ensure this project can be progressed, the LDA will provide LBTH with the technical requirements needed to future-proof local area network developments for connection to the London Thames Gateway Heat Network at a later date. An Energy Master Planning programme will also follow in 2009/2010 which will inform site-specific master planning and should identify specific opportunities in the Borough.

## 7 Publicly Accessible Open Space

- 7.1.1 Parks and open spaces can improve the quality of life and the health and wellbeing of local residents, encourage biodiversity, and combat the effects of climate change. Good quality green space adds to the character and quality of neighbourhoods and can also have economic benefits. Well planned green spaces are fundamental to achieving sustainable development and healthy urban neighbourhoods.
- 7.1.2 Ensuring a network of good quality, well designed and maintained parks and open spaces is a priority of both the Core Strategy and the Community Plan.
- 7.1.3 However, in a densely developed and populated urban area such as Tower Hamlets, the demands upon space are such that delivering open space is extremely challenging. The Core Strategy, the Site and Place Making DPD, this IDP, plus other projects such as the Green Grid Project<sup>30</sup> collectively work towards providing a well planned, good quality, accessible network of parks and open spaces, suitable to meet the needs of all the Borough's residents. Although green space across the Borough includes private amenity space, water space in addition to publicly accessible open space (PAOS), the IDP covers only PAOS as defined in the 2006 Open Space Strategy<sup>31</sup>. The approach and policy for amenity space is included in the Development Management DPD.
- 7.1.4 *Why do we need to plan for open space? – Current deficiencies in open space***
- 7.1.5 Figure 19 below provides a summary of existing PAOS in each Paired LAP, in hectares, using the definition of PAOS set out in the LBTH Open Spaces Strategy 2006. The figures in the second column identify the scale of open space required in each paired LAP to meet the Council's monitoring benchmark of 1.2 hectares per 1,000 people. The third column identifies the existing surplus or deficit of publicly accessible open space provision as measured on this basis.
- 7.1.6 The figures show the huge disparity across the borough, with LAPs 1 & 2, 3 & 4, and 7 & 8 having a deficit, and LAP 5 & 6 having a large surplus. This is a rather crude way to measure publicly accessible open space provision, with Victoria Park skewing the results.
- 7.1.7 At present, there are around 244 hectares of publicly accessible open space within Tower Hamlets, meeting the needs of around 226,500 people. This represents a ratio of 1.08 ha per 1,000 people, which is lower than the Council's monitoring target of 1.2 hectares per 1,000 people. The actual deficit in relation to this monitoring target is just over 28 hectares of publicly accessible open space.

**Figure 19: Current Public Open Space levels**

	Publicly Accessible Open Space		
	Existing Provision of PAOS (ha)	Requirement associated with existing population	Surplus/Deficit of PAOS (ha)
LAPs 1&2	29.4	76.0	-46.6
LAPs 3&4	29.8	62.7	-32.9
LAPs 5&6	133.6	57.4	76.2
LAPs 7&8	50.7	75.7	-25.0
<b>Tower Hamlets Total</b>	<b>243.6</b>	<b>271.8</b>	<b>-28.3</b>

**7.1.8 How much Open Space needs to be provided?**

*7.1.9 Quantitative Need*

7.1.10 The PPC&G Model identified the amount of open space that would be required in the Borough over the lifetime of the Core Strategy, should the current benchmark of open space provision be achieved. Calculations are based on existing levels of provision, and present the additional requirements based on the monitoring target of 1.2 hectares per 1,000 population required to meet the estimated population growth generated by new residential development. This is shown in Figure 20 below. This shows the anticipated publicly accessible open space requirements under both the lower density and higher density development scenarios, for each Place as defined for the Core Strategy.

7.1.11 In quantitative terms, the PPC&G Model identifies the need to provide between 79 and 99ha additional open space in the Borough between 2009 and 2025, depending on the density scenario. This means increasing the current supply of open space by between 29-37%.

**Figure 20: Publicly Accessible Open Space Requirements by Paired LAP**

	Lower Density				Total 2009 2025	Higher Density				Total 2009 2025
	2009-2015	2015-2020	2020-2025			2009-2015	2015-2020	2020-2025		
Aldgate	1.56	1.23	-	0.18	2.61	1.56	1.79	-	0.18	3.17
Bethnal Green	0.86	0.54	-	0.11	1.29	1.23	1.18	-	0.09	2.32
Blackwell and Leamouth	1.17	3.45		4.71	9.34	1.17	3.88		4.71	9.77
Bow	0.97	-	0.08	-	1.32	1.06	0.07	-	1.29	0.15
Bow Common	2.31	1.93		0.49	4.73	2.48	2.69		0.49	5.65
Bronley by Bow	2.89	1.39		0.75	5.03	3.20	1.67		0.83	5.71
Canary Wharf	0.45	5.02	-	0.23	5.24	0.45	5.55	-	0.23	5.77
Cubitt Town	1.16	4.56		1.98	7.70	1.16	6.38		3.34	10.87
Fish Island	0.53	4.20		0.53	5.27	0.53	5.22		0.53	6.28
Globe Town	1.00	0.79	-	0.02	1.77	1.00	1.50	-	0.02	2.47
Limehouse	1.20	1.52		0.72	3.45	1.20	2.39		1.02	4.61
Mile End	1.79	0.53		0.10	2.42	2.01	0.90		0.44	3.35
Millwall	9.45	2.27		0.91	12.64	10.05	3.54		1.73	15.32
Poplar	1.04	1.46	-	0.04	2.46	1.51	2.57	-	0.04	4.04
Poplar Riverside	1.59	0.92		0.32	2.83	1.99	1.56		0.54	4.08
Shadwell	0.12	0.04		0.03	0.19	0.17	0.27		0.03	0.47
Shoreditch	0.63	0.78		1.61	3.02	0.66	0.83		2.47	3.97
Spitalfields	2.31	2.59		0.57	5.47	2.31	2.59		1.01	5.91
Stepney	-	0.38		0.37	0.93	-	0.33		0.43	1.20
Tower of London	0.12	-	0.02	-	0.12	0.12	-	0.02	-	0.12
Victoria Park	-	0.05	-	0.04	-	0.15	-	0.04	-	0.24
Wapping	0.21	2.99	-	0.78	2.42	0.21	2.99	-	0.78	2.42
Whitechapel	-	0.10		1.17	1.75	-	0.10		1.86	2.71
<b>Totals</b>	<b>30.83</b>	<b>37.62</b>		<b>11.40</b>	<b>79.85</b>	<b>33.60</b>	<b>49.80</b>		<b>16.30</b>	<b>99.70</b>

### 7.1.12 Qualitative Need

7.1.13 In addition to this quantitative need for additional open space, it is also recognised that there is a need to improve the quality of existing open spaces, to ensure that they fulfil their purpose to existing and future residents. The Open Space Strategy carried out a qualitative survey of all the Borough's open spaces. The physical, visual, psychological and functional aspects of each site was assessed and scored against pre-determined evaluation criteria. Overall quality scores were derived for each space and this became a key criterion for identifying sites in need of investment. Those sites identified for priority improvement are listed in section 7.1.21 below, together with what progress has been made in this improvement programme.

### **7.1.14 How open space will be provided**

7.1.15 To achieve the quantitative requirement for open space as derived by the PPC&G Model is unfeasible and impractical given the density of existing development in the Borough, the pressures on land for various uses, and the price of developable space. Therefore policy towards PAOS (expressed through the Core Strategy, the adopted Open Space Strategy, and the Green Grid project which is underway), includes the following themes, which collectively will ensure a high quality, accessible, usable network of open space is provided now and in the future. The elements of the policy are:

- To create new open spaces
- To enhance existing open spaces
- To protect existing publicly accessible open space
- To connect both existing and new open spaces.

7.1.16 This package of measures form the platform for policy and implementation for open space in the borough over the lifetime of the Core Strategy.

### **7.1.17 Creating New Open Spaces**

7.1.18 The Core Strategy identifies a number of opportunities for new open spaces, indicating the area of search for their location. These do not represent all new open spaces in the Borough, with others still to be identified through the Site and Place Making DPD or to be delivered through site-specific developments or master plans. In addition to those listed below, new strategic publicly accessible open spaces outside the Borough boundary will address deficiencies in the east of the Borough. These include the Lea River Park, FAT Walk and the Olympic Park, being progressed by other organisations in conjunction with the Council.

7.1.19 New Open Spaces identified through the Core Strategy are as follows:

- Poplar Riverside (by 2015): a park of 6 hectares. Incorporating measures to protect the area against flood risk as well as providing facilities for active play space for a range of young people and adults.
- Bethnal Green (by 2015): a local park of at least 1 hectare
- Fish Island (2015-2020): 2.3 hectares of open space, with provision of child-play spaces and family gathering areas with seating, lawns, and diverse planting.
- Bromley-by-Bow (2015-2020): 2 hectares including 0.5ha civic square, a 1ha formal residential green space, and 0.5ha residential green space with active space for play and family gatherings.
- Aldgate (2015-2020): 1.75 hectares of open space, to include 0.8ha of green open space, 0.3ha green/urban space, 0.65 public open space.
- Spitalfields and Shoreditch (2020): 2.5 hectares, to include 1.4 ha of open green space.
- Wood Wharf (2015): 2.5ha of green space to provide for the residential neighbourhood.

7.1.20 Indicative costs for these open spaces are provided below. More detail regarding the assumptions these costs are based on can be found in the accompanying Costs Report at Appendix 1.

- Poplar Riverside: £2.7m
- Bethnal Green: £0.9m
- Fish Island: £1.1m
- Bromley-by-Bow: £1.6m
- Aldgate: £2.35m (based on know costs from master planning)
- Spitalfields and Shoreditch: £2.5m

#### *7.1.21 Improving Existing Open Spaces*

7.1.22 It is also recognised that to provide for the needs of the Borough the supply of open space is not just a quantitative issue. Improving the quality of existing open space and improving access to these spaces is also important to provide for the needs of the Borough's population. The Open Space Strategy and its supporting information base have been used to prioritise existing open spaces that are in need of investment.

7.1.23 The list below identifies these priority schemes by LAP, together with which of these schemes have been implemented since the Strategy's adoption in 2006 (or will be completed in 2009/10). This has represented a funding package of £5.9m, sourced through a variety of funding sources including planning obligations, heritage lottery funding, the London Marathon Charitable Trust, the Local Priority Parks budget for the delivery of the Open Space Strategy, Play Pathfinder funding, the Participatory Budgeting Process, and various other sources.

<b>Site</b>	<b>Priority site investment (2006/07 to 2009/10)</b>
<b>LAP 1</b>	
Meath Gardens	£354,000
Allen Gardens	£50,000
Ravenscroft Park	£374,000
Middleton Green	£270,000
St Matthew's Church Gardens	Phase 2
<i>LAP 1 Subtotal</i>	<i>£1,048,000</i>
<b>LAP 2</b>	
St Bartholomew's Gardens	£144,000
Bethnal Green Gardens	£495,000
Weavers' Fields Adventure Playground	Phase 2
Chicksand Ghat	£500,000
Mallon Gardens	Phase 2
<i>LAP 2 Subtotal</i>	<i>£1,139,000</i>
<b>LAP 3</b>	
Belgrave Street Open Space	£53,000
Stepney Green Gardens	£80,000
St Dunstan's Churchyard	Phase 2
York Square Gardens	Phase 2
Whitehorse Road Park	£234,000
<i>LAP 3 Subtotal</i>	<i>£367,000</i>
<b>LAP 4</b>	
Swedenborg Gardens	£127,000
St James' Gardens	£91,000
Wapping Gardens	£150,000
Albert Gardens	Phase 2
Gosling Gardens	£234,000
<i>LAP 4 Subtotal</i>	<i>£602,000</i>
<b>LAP 5</b>	
Victoria Park	masterplan site
Four Seasons Green	Phase 2
Grove Hall Park	£259,000
Tredegar Square Gardens	£50,000
St Mary's Churchyard (Bow)	Phase 2
<i>LAP 5 Subtotal</i>	<i>£309,000</i>
<b>LAP 6</b>	
Tower Hamlets Cemetery Park	£241,000
Rounton Road Open Space	£202,000
Prospect Park	£209,000
Furze Green Open Space	£395,000
Ackroyd Drive	Phase 2
<i>LAP 6 Subtotal</i>	<i>£1,047,000</i>

Site	Priority site investment (2006/07 to 2009/10)
<b>LAP 7</b>	
Bartlett Park	Phase 2
Pennyfields Open Space	£303,000
Jolly's Green	Phase 2
Brickfield Gardens (Mile End Park)	Phase 2
St Matthias Churchyard/Poplar Park	£444,000
<i>LAP 7 Subtotal</i>	<i>£747,000</i>
<b>LAP 8</b>	
Millwall Park and Mudchute Farm	masterplan site
Cotton & Bazeley Street Open Space	£94,000
Sir John McDougal Gardens	£191,000
St John's Park	£409,000
Strafford Street Playspace	Phase 2
<i>LAP 8 Subtotal</i>	<i>£694,000</i>
<b>Grand Total</b>	<b>£5,953,000</b>

#### 7.1.24 Measuring improvement

7.1.25 The improvement programme is a rolling programme. The list set out above suggests that significant progress has been made in open space improvements. However, it is essential that any investment delivers real benefits to the quality of the spaces.

7.1.26 The Open Space Strategy identified a number of measures that would be applied to measure progress in improving the quality of open space provision: Since the Open Space Strategy was approved in 2006 the Council has increased the number of parks and open spaces with Green Flag Awards. It has also improved its standing in the annual London in Bloom Awards from Silver to Silver Gilt. The level of public satisfaction in parks and open spaces is also improving as measured through:

- National Indicators
- Annual Residents Survey responses
- Annual Parks Survey satisfaction indicators

7.1.27 These indicators confirm that real qualitative improvements are being made.

7.1.28 The success of the programme to date means that there has already arisen a need to revisit the qualitative assessment of individual sites in order to determine a revised set of priorities for future investment, ensuring that such investment is effectively targeted at the areas most in need of improvement.

7.1.29 This qualitative assessment review will be carried out in 2009/2010 and a revised list of priority sites will follow. In terms of the funding and costs of these improvement projects, as the number of projects and



their specification has not as yet been confirmed, a reliable cost cannot be provided at this stage. However, the £6m of funding raised and implemented for the first phase provides a useful precedent and benchmark cost for the funding required and available for the next 3 - 5 years, from 2010-2015.

7.1.30 The revised policy framework of “create, protect, improve and connect” moves away from a quantity standard which aims to maintain levels of provision in line with population growth. As the population grows, usage of existing spaces will increase significantly. Investment underpinning the Open Space Strategy Phase 1 was based on the assumption that new open space would be created to cater for additional demand. In light of increased future use, the lifespan of any investment will need to be reviewed. While Phase 1 investment provides a benchmark, future investment will need to be adjusted to take into account greater wear and tear and the need to use more durable materials. The IDF will need to be reviewed in light of the outcomes of the update of the Open Space Strategy.

7.1.31 There are also two specific projects which are aimed at improving two of the larger and more important open spaces in the Borough, the First being the Victoria Park Master Plan, which includes a package of new projects and improvement measures for the Park, which could total £10m, including a prospect of £5m from the Heritage Lottery Fund, and £5m from the Council. In addition the Millwall Park/Mudchute Park Draft Master Plan contains proposals to improve Millwall Park and integrate it with the adjacent Mudchute Park. Costs or funding for this project have yet to be identified.

#### *7.1.32 Protect*

7.1.33 The protect element of the policy aims to resist the loss of existing PAOS including play spaces and playgrounds, as well as resisting the loss of private amenity space and the loss of soft surfaces into hard impermeable surfaces. The basis of this policy would be to protect PAOS from other forms of development, as well as protecting back gardens and communal amenity space from being lost to over development and allow for rainwater drainage to prevent flooding.

#### *7.1.34 Connecting*

7.1.35 Connecting and improving access to open spaces will be achieved by establishing and maintaining a Green Grid programme that sets out priority projects that create a network of new and improved publicly accessible open spaces across the Borough. This will include primary routes connecting the areas' parks and open spaces together, as well as with links to the London Strategic Walking Network; and local links which act as 'feeder' routes into the primary routes, linking schools, town centres and transport hubs with the primary routes and open spaces.

7.1.36 In addition the Green Grid project will seek to improve access to the strategically important green open spaces including Victoria Park and Mile End Park, including the proposed Olympic Park, Lea River Park and FAT Walk. Specific locations will be identified through the Site and Place Making DPD.

#### *7.1.37 Delivery mechanisms*

7.1.38 As has already been recognised, delivering open space in Tower Hamlets given its dense, urban character is challenging, and is made more challenging due to the pressure for development. Delivering open space is a challenge for the Borough in both land use planning and economic terms.

7.1.39 The council will proactively plan for the qualitative and quantitative increase in all types of open space but particularly publicly accessible open space. This will primarily be achieved through the Site and Place Making DPD, as well as the Development Management DPD, and informed by the Green Grid project. This will be done in the following ways:

- Use the Site and Place Making DPD to identify specific locations for new open spaces
- Use master plans to identify the detailed location and specification for open spaces identified within the Site and Place Making DPD for new open spaces, to be delivered through planning obligations or other sources of funding
- Seek new opportunities for publicly accessible open space provision as they arise, particularly using the Development Management DPD to require development sites to provide publicly accessible open space where they are of an appropriate scale or density to do so
- Seek developer contributions for public open space from private development sites not already making an appropriate contribution to the Green Grid through actual provision
- Continue to provide private amenity space through the Development Management DPD.

7.1.40 The Annual Monitoring Report will continue to measure progress on how much PAOS is being delivered through these measures, and the 1.2ha/1,000 population benchmark will be maintained for monitoring purposes. The AMR will also monitor the qualitative element of the enhancement strategy.

## **8 Leisure and Cultural Infrastructure**

### **8.1 Leisure Centres**

- 8.1.1 The provision of high quality, accessible leisure facilities will help to achieve the Council's corporate vision of improving the quality of life of everyone in the Borough. It can help support outcomes relating to health, community cohesion, and economic and social wellbeing.
- 8.1.2 For the purpose of the Infrastructure Delivery Plan leisure facilities include swimming pools, indoor sports halls and health and fitness gyms.
- 8.1.3 Delivering this network of leisure facilities in Tower Hamlets is a challenge owing to a high demand for space and competition for other land uses, problems with deprivation and ill health, and services being put under increased pressure as the growth targets and objectives set out in the Core Strategy are achieved.
- 8.1.4 Therefore a robust, thoughtfully planned and carefully executed approach to providing for the leisure and sporting needs of the Borough is needed. The vehicle for this planning is Sporting Places – The Draft Leisure Facilities Strategy for the London Borough of Tower Hamlets<sup>32</sup>. This strategy is based on current best practice and policy and is designed to contribute to and inform the Core Strategy. It is both a service and spatially focused plan, taking into account the current supply of leisure facilities, compares this to current and future demand, identifies gaps in future provision, and assess the quality and suitability of existing facilities.

#### **8.1.5 Why? – The Supply and demand of leisure facilities**

##### *8.1.6 Existing provision of Sports Halls*

- 8.1.7 Only publicly accessible sports halls (e.g. publicly operated or dual use facilities) within the Borough are taken into account, in line with Sport England guidance. Commercially operated and private use facilities are excluded. In addition, as dual use facilities are only open outside of school hours the model assumes a 25% reduction in the level of accessible sports hall space. Sports halls are measured in terms of the number of badminton courts they provide, with a standard size sports hall comprising of four courts. 20 sites meet the criteria for being included in the Planning for Population Change and Growth Model, comprising of 3 full public facilities, and 17 dual use or club use facilities that are open to the public.
- 8.1.8 Figure 21 below provides a summary of existing Sports Halls in each Paired LAP, measured in courts, in line with guidance from Sport England.

8.1.9 The Sport England standard for provision of sports halls is 0.29 per 1,000 population. This shows an existing deficit of 17.9 courts, or 4 sports halls.

**Figure 21: Existing Provision of Sports Halls**

	Leisure Provision - Sports Halls		
	Existing Provision of Sports Halls (courts)	Requirement associated with existing population	Surplus/Deficit of Sports Halls (courts)
LAPs 1&2	12.5	18.4	-5.9
LAPs 3&4	19.75	15.2	4.6
LAPs 5&6	10.25	13.9	-3.6
LAPs 7&8	5.25	18.3	-13.0
<b>Tower Hamlets Total</b>	<b>47.75</b>	<b>65.7</b>	<b>-17.9</b>

#### 8.1.10 Existing provision of Swimming Pools

8.1.11 Only publicly accessible swimming pool space (e.g. publicly operated and dual use facilities) within the Borough is taken into account, in line with Sport England guidance. Commercially operated and private use facilities are excluded. All learner water (e.g. teaching pools) and leisure water are excluded, as are main swimming pools with less than 100m<sup>2</sup> of water space since these are not considered suitable for public lane swimming. Four sites meet the criteria for being included in the Planning for Population Change and Growth model, which include all four swimming facilities managed by Greenwich Leisure Limited (GLL). Figure 22 below provides a summary of existing Swimming Pools in each Paired LAP, measured in sq m, in line with guidance from Sport England. The Sport England standard for provision of swimming pools is 10.23 sq m of water per 1,000 population. This shows that there is an existing deficit of between 1 and 2 swimming pools (the standard size for a pool being 375 sq. m.).

**Figure 22: Existing Provision of Swimming Pools**

	<b>Leisure Provision - Swimming Pools</b>		
	Existing Provision of Swimming Pools (sq m)	Requirement associated with existing population	Surplus/Deficit of Swimming Pools (sq m)
LAPs 1&2	416	648	-232.0
LAPs 3&4	466	534	-68.5
LAPs 5&6	425	489	-64.3
LAPs 7&8	313	645	-333.0
<b>Tower Hamlets Total</b>	<b>1,620</b>	<b>2318</b>	<b>-697.8</b>

**8.1.12 What is needed? The required supply of leisure facilities**

8.1.13 This section of the report considers the additional requirement for leisure provision, including both sports halls and swimming pools, associated with the population growth estimated as a result of new development in Tower Hamlets to 2025.

*8.1.14 Sports Halls*

8.1.15 Calculations are based on existing levels of provision, and present the additional requirements based on the targets suggested by Sport England to meet the estimated population growth generated by new residential development. These show the anticipated publicly owned accessible sports hall requirements under both the lower density and higher density development scenarios. This identifies a need for 5 Sports Halls over the life of the plan (1 Sports Hall equates to 4 courts). This does not include the existing deficit discussed above, which identified a current deficit of 4 sports halls.

**Figure 23: Sports Hall Requirements by Paired LAP**

Sports Hall Requirements (courts)	Lower Density			Higher Density		
	2009-2015	2015-2020	2020-2025	2009-2015	2015-2020	2020-2025
LAPs 1&2	1.14	1.40	0.67	1.29	1.87	1.08
LAPs 3&4	0.17	1.28	0.11	0.19	1.58	0.20
LAPs 5&6	1.38	1.94	0.08	1.52	2.56	0.17
LAPs 7&8	2.88	4.47	1.89	3.23	6.02	2.49
<b>Tower Hamlets Total</b>	<b>5.57</b>	<b>9.09</b>	<b>2.76</b>	<b>6.24</b>	<b>12.03</b>	<b>3.94</b>

8.1.16 Given the model is based on projections, and there are other influences as yet not fully assessed such as facilities provided through the Olympics (the impact of which cannot yet be fully understood), local circumstances need to be taken into account. Given the dense nature of the Borough, and its relatively good accessibility, residents can and do travel relatively long distances to access sports centres compared to what the Sport England standards may suggest.

8.1.17 Therefore the IDP and Core Strategy are to focus on setting the framework for the delivery of 3-4 new sports hall facilities by 2018.

8.1.18 New sports hall space could consist of a shared scheme with swimming pools, be part of an extended school through the BSF programme, or a stand-alone facility. There are also ongoing programmes to improve the quality of, and access to, the existing Sports Halls to ensure the current provision provides a good quality and efficient service.

#### 8.1.19 Swimming Pools

8.1.20 Figure 24 below identifies a need for an additional 782sq m. of swimming pool space over the lifetime of the plan (under the higher density scenario). This equates to 2 swimming pools (at 375sq m. per pool). This does not include the existing deficit, which combined with additional need is in the region of 3 to 4 new pools.

**Figure 24: Swimming Pool Requirements by Paired LAP**

Swimming Pool Requirements (sq m)	Lower Density			Higher Density		
	2009-2015	2015-2020	2020-2025	2009-2015	2015-2020	2020-2025
LAPs 1&2	45	50	24	50	66	38
LAPs 3&4	12	45	4	13	56	7
LAPs 5&6	72	68	3	77	90	6
LAPs 7&8	134	158	67	146	212	88
<b>Tower Hamlets Total</b>	<b>263</b>	<b>321</b>	<b>97</b>	<b>286</b>	<b>425</b>	<b>139</b>

8.1.21 Again, there are caveats attached to these assumptions, one in regard to the fairly generous space allowances which use lane-swimming space rather than for general use, and secondly it does not as yet take into consideration the Olympic Aquatics Centre, which will provide a significant amount of water space, though the exact amount of which and access arrangements to it are not yet known. It will however provide a significant amount of water space, though it is likely to be focused on performance and competition, rather than general leisure.

8.1.22 Based on these factors it is expected that the shortfall is more likely to be in the region of 2 pools by 2020. Further modelling needs to take place once more precise information is available regarding the use and accessibility of the Olympic Aquatics Centre.

8.1.23 There are a number of options available to deliver new pools:

- New stand-alone facilities, either a swimming pool or a 'wet/dry' facility combined with a Sports Hall
- Delivered as part of an extended school through the BSF programme
- Renovation of redundant swimming pool

8.1.24 The exact form of provision is subject to further development and feasibility testing, which will be progressed through the Leisure Services Strategy – currently at draft stage.

### **8.1.25 Health and Fitness Gyms**

8.1.26 There are 25 facilities providing health and fitness provision within the Borough, including 7 public facilities, 6 dual use facilities, and 12 commercially operated clubs. For health and fitness provision the modelling takes into account commercially operated clubs, due to the importance of private gyms. The demand modelling also takes into account daytime resident population, due to the influx of employees using these facilities.

8.1.27 The current supply of health and fitness equipment is between 1,359 and 1,467 fitness stations (by which provision is measured). Current demand equates to 1,889 stations, leaving an under provision of between 422 and 530 stations. This shortfall is expected to rise to between 697 and 805 stations in 2018 and 891 and 999 stations in 2028. However if the net daily influx of population is removed from this model, the likely source of a significant amount of demand, this would result in a net oversupply of health and fitness provision.

8.1.28 The supply of gym and fitness equipment is an important commercial consideration when providing leisure centres, as they are attractive to customers and can subsidise other facilities.

### **8.1.29 Who will deliver leisure facilities?**

8.1.30 The Communities, Localities and Culture (CLC) Directorate within LBTH is responsible for planning leisure facilities in the Borough, and are the authors and owners of the Leisure Facilities Strategy. The management of Leisure Centres is contracted out to Greenwich Leisure Limited (GLL), who entered into a 15 year contract to manage the Borough's leisure.

### **8.1.31 How will leisure facilities be delivered?**

8.1.32 The Leisure Facilities Strategy recognises that funding for both capital and revenue projects within the public sector are likely to become more constrained over coming years. Along with mainstream funding, planning obligations have previously been earmarked for enabling leisure centre development. However, this again may not prove to be a reliable funding source for new projects. Revenue funding is also an important part of the funding mix, and will continue to do so and must be considered as part of the facilities planning.

8.1.33 Therefore other solutions are needed in order for the provision of an effective network of leisure provision. The Council is therefore seeking to align capital funding streams where possible, for example the Building Schools for the Future programme, by which dual use facilities (between the public and the school) can be developed in areas of deficiency.

### **8.1.34 Potential Costs**

8.1.35 Indicative costs for the range of leisure facilities are as follows:

- Total costs for wet and dry facility: £11.1m - £13.9m
- Conversion of existing facilities for leisure use: £5.9m
- Stand-alone swimming pool: £8.8m
- Cost of stand-alone sports hall: £2.735m

8.1.36 Detail regarding the assumptions on which these costs are based can be found within the accompanying Costs Report at Appendix 1.



### **8.1.37 Where? – The location of new leisure facilities**

8.1.38 In terms of principles that guide the location of new facilities, the Core Strategy aims to locate public facilities such as leisure centres in town centres, where there are other complementary uses and are accessible in relation to the public transport network. The Leisure Centre Strategy acknowledges this in its aim to provide a network of leisure centres across the Borough.

8.1.39 This sets general principles in relation to the type of locations that are suitable for leisure centres. The location of leisure centres also has to relate to the supply and demand of facilities, and where there are currently gaps in provision or where leisure centres are relatively inaccessible to parts of the Borough. These areas are discussed below.

8.1.40 It is important to recognise that identifying areas of deficiency is not the same as identifying where new facilities will be located. The purpose of this evidence is to provide a framework for making more detailed locational decisions by identifying the areas of need alongside criteria for the location of facilities. The actual identification of sites will be progressed by the implementation of the Leisure Strategy and through the Site and Place Making DPD.

### **Sports Halls**

8.1.41 Although there is generally a good spread of publicly accessible sports halls across the Borough, there are certain pockets that fall outside current catchment areas, in which suitable locations for new sports facilities will be explored. However it also must be considered that travel patterns, especially in a densely populated, relatively well connected place like Tower Hamlets, must be treated with a degree of caution as people do travel relatively long distances across the borough to access some services (though we accept that reducing the need to travel to access services is an important strategic objective).

8.1.42 *Deficiency in the north of the Borough:* there is an area across the wards of Bow East and Bow West which are currently outside the accessibility of existing sports halls.

8.1.43 *Deficiency in the south of the Borough:* there is only one publicly accessible sports hall facility on the Isle of Dogs, and some of the Blackwall & Cubitt Town and Millwall wards fall outside the accessibility catchments of existing provision.

## **Swimming Pools**

8.1.44 Although there is generally a good spread of swimming pools through the Borough there are areas of significant deficiency in terms of accessibility.

8.1.45 *Deficiency in the north of the Borough:* the north-eastern tip of the Borough, mainly comprising of the wards of Bow East and Bow West, fall outside the catchment of publicly accessible pools. The population in this area unable to easily access a swimming pool is also expected to rise significantly as a result of development in places such as Fish Island and along the River Lea.

8.1.46 *Deficiency in the east of the Borough:* much of the far east of the Borough is inaccessible to public pools, extending into the wards of Bromley-by-Bow and much of East India and Lansbury.

8.1.47 *Deficiency in the west of the Borough:* there is an area to the west of the Borough, mainly in the wards of Weavers and Spitalfields & Banglatown which falls between the catchments of two pools. However, residents in this area are only marginally outside the catchments of these facilities, and so is not considered an area of significant under-provision.

## **Locations for new sports halls/leisure centres**

8.1.48 A consideration of deficiency and opportunity to deliver new locations has led to the identification of two areas of search in the Core Strategy DPD for sports halls and swimming pools, namely Poplar and Cubitt Town for new combined wet/dry facilities (sports hall combined with swimming pool). In addition, current planning aims to provide 1-2 sports halls on a co-location basis as part of the BSF programme, plus 1 swimming pool, the location for which will be identified through the implementation of the Sporting Places Strategy and the Site and Place Making DPD.

## **Health and fitness Gyms**

8.1.49 There is generally a good distribution of health and fitness equipment across the Borough, though there are two areas of minor deficiency.

8.1.50 *Deficiency in the centre of the Borough:* there is a small area of deficiency in the St. Dunstan's & Stepney ward, however this area is relatively small and residents are able to access facilities with only a marginally increased travel distance.

8.1.51 *Deficiency in the south of the Borough:* There is an area of deficiency in the south east of the Isle of Dogs, though there is an adjacent cluster of four large commercial clubs close by.

### **8.1.52 When?**

- 8.1.53 The PPC&G Model identifies a need for 1 additional sports hall by 2015, an additional 3 halls by 2020, and a further sports hall by 2025. However the approach is to focus on the delivery of 3-4 Sports Halls by 2020, with the impact of the sports infrastructure around the Olympics to be modelled in more detail when further details emerge.
- 8.1.54 The model identifies a need for 1 additional swimming pool between 2015 and 2020, and a further pool by 2025. The strategy is to provide 2 swimming pools by 2020. The Strategy is currently at draft stage, with approval sought in 2009.

## **8.2 Idea Stores**

- 8.2.1 The Idea Store concept was introduced in the Borough in 1999 and was intended to radically transform the way that the Council delivered its library and information services. It sought to modernise the way libraries were used, retaining its core functions but adding other services to widen the scope of user and increase patronage.
- 8.2.2 It is recognised that offering high quality, accessible library and information services can contribute to improving learning and skills development, community cohesion, and improves the health, social, and economic well-being of the population.
- 8.2.3 Idea Stores provide education, career support and training, meeting areas, cafes, arts and leisure pursuits, as well as core library services. This range of services was brought together in a modern, accessible location based on a retail environment. The first Idea Store was opened in Bow in 2002, followed in by the Chrisp Street Idea Store in 2004, Whitechapel in 2005 and Canary Wharf in 2006.
- 8.2.4 In 2009 the model for providing Idea Stores has been updated to ensure it remains future-proof. The approach to providing library services through the Idea Store concept in this Infrastructure Plan is based both on the evidence of supply and demand from the Population Change and Growth model, and the strategy for provision emerging from the Idea Store Strategy 2009<sup>33</sup> (currently at draft stage).

### **8.2.5 Why? The demand for and supply of Idea Stores**

#### *8.2.6 Existing provision of Idea Stores and Libraries*

- 8.2.7 This capacity assessment and the Planning for Population Change and Growth model considers Idea Stores and Libraries together as recommended by guidance issued in 2008 by the Museums, Libraries and Archives Council entitled Public Libraries, Archives and New Development - A Standard Charge Approach<sup>34</sup>. Figure 25 below provides a summary of the library space (not including additional uses in Idea Stores) provided in each Paired LAP, measured in sq m. The

Museums, Libraries and Archives Council suggest a standard of 30 sq m of library space per 1,000 population.

**Figure 25: Existing provision of Idea Stores and Libraries**

	Existing Provision of Idea Stores and Libraries (sq m)
LAPs 1&2	5,529
LAPs 3&4	176
LAPs 5&6	1,324
LAPs 7&8	2,720
<b>Tower Hamlets Total</b>	<b>9,749</b>

8.2.8 Translating this into an analysis of surplus/deficit, at January 2009, there is a slight surplus of capacity for Library equal to 194 sq m. The distribution of this provision is shown on Figure 26.

**Figure 26: Current Idea Store and Library provision**

	Surplus/Deficit of library space (sq m)
LAPs 1&2	1,519
LAPs 3&4	-1,391
LAPs 5&6	-288
LAPs 7&8	354
<b>Tower Hamlets Total</b>	<b>194</b>

### **8.2.9 What will be provided? – The Idea Store Network**

8.2.10 This section of the report considers the additional requirement for library floorspace associated with the population growth estimated for the Borough, and establishes the framework for decision making regarding the locations for new Idea Stores.

#### *8.2.11 The Quantitative need*

8.2.12 The required provision of library space is shown in Figure 27 below. These calculations are based on existing levels of provision, and present the additional requirements based on the target of 30 sqm per 1,000 population required to meet the estimated population growth generated by new residential development. These show the anticipated library floorspace requirements under both the lower density and higher density development scenarios. This analysis suggests there is a requirement for 2,296sq m. of library space over the life of the Plan

under the higher density scenario. How this will be provided through the Idea Store network is explained below.

**Figure 27: Library and Idea Store Requirements by paired LAP**

Library and Idea Store Requirements (sq m)	Lower Density			Higher Density		
	2009-2015	2015-2020	2020-2025	2009-2015	2015-2020	2020-2025
LAPs 1&2	131	145	70	147	193	112
LAPs 3&4	36	132	12	39	164	21
LAPs 5&6	210	200	9	225	265	17
LAPs 7&8	393	462	195	429	623	257
<b>Tower Hamlets Total</b>	<b>771</b>	<b>940</b>	<b>285</b>	<b>840</b>	<b>1245</b>	<b>408</b>

### 8.2.13 The Idea Store Network

8.2.14 The Idea Store network has developed since the first strategy, with the current proposed hierarchy that determines the kind of services Idea Stores offer. This network consists of 4 Anchor Idea Stores (those already operating) plus 2 to 3 Idea Stores Local which provide targeted learning, information, library and advice services in partnership with other LSP agencies.

8.2.15 The Idea Store 'local' concept would be smaller in size than the original Idea Store focusing on high quality core library services, and as they are smaller in size could be located in existing retail facilities, contributing to the regeneration of town centres and reflecting difficulties in funding.

8.2.16 Each of these Idea Stores Local will provide between 1,000-1,500sq m. of library space. This could potentially provide between 2,000-4,500 sq m. of space, depending on the number and size of the units. This would provide for the quantitative requirement identified through the model above, as well as providing additional capacity which could potentially act as replacement space for current library space deemed to be unsuitable for current standards of provision.

### 8.2.17 Who? – Delivery and Management arrangements

8.2.18 The Idea Store Strategy and the management of facilities is led by the Communities, Localities and Culture Directorate, but reflecting the multi-functional nature of the Idea Stores this strategy was produced with inputs from Development and Renewal through the LDF and Core Strategy process, with input from the Asset Management Strategy, and from the Children, Schools and Families directorate as the responsible directorate for education and learning. This partnership approach

ensures that an optimum mix of uses of the Idea Stores is identified and the most appropriate delivery mechanism is used through the Council's asset management and capital investment programme.

### **8.2.19 How? – Costs and Funding sources**

8.2.20 The development of the Idea Store network benefited from a considerable amount of external funding and bringing together library, information and learning services was strongly supported by a range of partners.

8.2.21 The New Skills Funding Agency will provide funding opportunities for lifelong learning provision in Idea Stores. Tower Hamlets college is also a key partner and provides funding and through learning provision. Funding will also include mainstream capital funding from the Council, through planning obligations, or as a key partner on new development opportunities where there is an opportunity to establish an Idea Store as part of the overall development.

8.2.22 It is important for the Council and its partners to maximise funding opportunities where available as well as seeking to provide a best value return on this investment and offer a value for money service.

8.2.23 Indicative costs for Idea Stores local are as follows:

- Total cost for new build (stand-alone): £3.26m-3.6m
- Total cost for new build (mixed use): £3.2m-3.63m

8.2.24 The assumptions on which these indicative costs are based are contained within the accompanying Costs Report at Appendix 1.

### **8.2.25 Where? – The Idea Store network**

8.2.26 The identification of further sites for Idea Stores is a process that needs to take into account a number of issues:

1. Current 'gaps' in the catchment of the Idea Store network to maximise access to their services across the borough,
2. Locational criteria set for Idea Stores expressed through the Idea Store Strategy and the LDF Core Strategy DPD,
3. Consideration of funding constraints in the private and public sectors.
4. A consideration of opportunities for co-location in order to deliver best value from the Council's and its partners capital investment programme

8.2.27 A consideration of all these issues provides the framework for making more detailed locational choices for delivering the next phase of Idea Stores, to be made through the Site and Place Making DPD and the Library Store Strategy.

## *1. Catchment analysis*

- 8.2.28 The Idea Store Strategy suggests that despite the accessible locations in which the Idea Stores are located, analysis of the geography of those who access the Idea Stores suggest that additional service points will be required to ensure the accessibility of the Idea Store network is maximised. However, traditional catchment analysis used for library users has limitations due to the additional distances and geography that people in Tower Hamlets are prepared to travel access Idea Stores due to their town centre locations, proximity to transport nodes and other shops and services, and the additional services the Idea Stores offer which further increase their attractiveness. Despite this, some analysis of the catchment network is useful in informing the Idea Store Strategy and its implementation through the Core Strategy, the IDP, and subsequent DPDs.
- 8.2.29 Analysis shows large clusters of use around Idea Store Whitechapel, Idea Store Chrisp Street, Idea Store Bow, and Watney Market Library. There are smaller areas of high usage around Bethnal Green and Cubitt Town Libraries (smaller as they are in less accessible locations).
- 8.2.30 Areas of low membership are in the north-west of the Borough, the Wapping area, the south of the Isle of Dogs, Mile End and Bromley-by-Bow. Critically the Bromley-by-Bow, Mile End and north-western areas are some of the most deprived parts of the Borough, and also have accessibility problems in the form of severance from major transport infrastructure, such as major roads and railway lines. This is also likely to affect usage patterns.

## *2. Funding constraints*

- 8.2.31 The current economic climate has put pressure on and created uncertainty around sources of funding such as planning obligations. This economic uncertainty is not limited to the private sector with public spending also tightening and so capital investment is becoming more constrained, and so services need to consider carefully the viability of its investment decisions and identify alternative sources of funding or vehicles for delivery. The strategy for Idea Stores recognises this and is pursuing joint-working with other partners to make efficiencies where possible.

## *3. Co-location*

- 8.2.32 The Council and its LSP partners are seeking, where viable, opportunities to co-locate public services. Idea Stores could provide a wide range of community services such as health and employment advice and information.
- 8.2.33 There are specific opportunities through the Building Schools for the Future programme to deliver value for money capital investment by considering co-locating library and information services alongside

education. This is potentially a good model for delivery where BSF sites are in town centre locations. Other co-location opportunities are being progressed with other providers of public services such as training and education, and using existing units in town centres to reduce capital costs.

8.2.34 More detailed decisions regarding co-location will be progressed through the initial implementation of the Idea Store Strategy in 2009 and 2010, through the Site and Place Making DPD, and through the Council's Asset Management Strategy.

#### *4. Locational criteria*

8.2.35 The LDF Core Strategy identifies the need to focus community and cultural facilities in town centres to ensure the sustainability of those centres and make facilities accessible to the widest number of people. The retail location criteria for Idea Stores support and conform to the LDF.

#### *8.2.36 Areas of search for new Idea Stores*

8.2.37 A consideration of the issues described above forms the framework within which more detailed location decisions for the roll out of the next phase of Idea Stores can be made.

8.2.38 There are areas of search (corresponding with the Core Strategy 'places') which will be considered as preferred locations when making these decisions. These are:

- Cubitt Town: to be accessible to the southern part of the Isle of Dogs, close to other retail and community services, and accessible via the Crossharbour DLR station and local buses.
- Shadwell: as an upgrade for the library at Watney Market.
- Bethnal Green: within the town centre as part of a mix of other social and community facilities and recognising the historic importance of Bethnal Green Library
- Bromley-by-Bow: an Idea Store in this location would serve existing residents in Bromley-by-Bow as well as emerging communities in Leaside. The town centre is already well served by public transport, which is also planned for improvement.

8.2.39 It is not suggested that an Idea Store will be provided in each of these locations, but that these places have been identified as potential locations, with further analysis and feasibility work to be progressed by a business case involving the Idea Store Strategy's Implementation Programme, the Core Strategy and subsequent Site and Place Making DPD, and the Tower Hamlets Asset Management Strategy.



#### **8.2.40 When?**

8.2.41 The Model analysis presented above suggests that the threshold to determine the need for another Idea Store of the size envisaged will be passed in the 2015-2020 period, where the first and second additional Idea Store Local will be delivered. The potential third Idea Store Local will be delivered in the 2020-2025 time period.

8.2.42 However, it may become necessary to carry out upgrade or replacement of existing facilities at an earlier stage to ensure capacity is generated in time for population growth and does not lag behind.

## **9 Emergency Services**

- 9.1.1 The IDP takes into account Policing, Fire and Ambulance needs, relating primarily to the demands that such services put on space through buildings and facilities, rather than the way the service is delivered (though of course the latter can partly determine the former).
- 9.1.2 These services are at various stages of reviewing how they use their assets, and what implications this might have on the Borough in terms of infrastructure provision. We have supplemented the knowledge from these written documents with consultation through the Local Strategic Partnership.

### **9.2 Police**

- 9.2.1 The Metropolitan Police Service (MPS) delivers policing in London, with the Metropolitan Police Authority owning and managing the Police Estate. The Metropolitan Police Estate Asset Management Plan - Tower Hamlets (November 2007)<sup>35</sup> is the main source of information for how the Police is coordinating uses for its' buildings between now and 2010. The MPS also made representations to the Council as part of the consultation process for the Core Strategy which we have also considered as part of the IDP.

#### ***9.2.2 Why do we need to plan for changes to policing?***

- 9.2.3 The need for the MPS to review how and where it operates its services from is partly dependent on population growth, and partly due to changes and modernisation in the way that policing operates in the community. As the population grows and communities change, the number of police to serve them also rises. There are particular challenges in Tower Hamlets such as the degree of projected population change, high levels of deprivation, unemployment and crime, and preparing for the impacts of the Olympics and Paralympics in 2012. These factors may impact upon how services are delivered in the future.
- 9.2.4 In addition there are changes to the way policing works in relation to a growing emphasis on community policing through the Safer Neighbourhoods programme, changing crime patterns, a need to modernise its working environments, provide effective flexible space to respond to the changes in the Police force, and a move towards more effective joint-working with other agencies.

#### ***9.2.5 What should we plan for in relation to Police services?***

##### ***9.2.6 Safer Neighbourhood Bases***

- 9.2.7 The Safer Neighbourhoods programme has established a local policing team dedicated to each neighbourhood (which usually equate to

wards). The central principle is to locate each team in an accessible location close to the heart of the community. Some Safer Neighbourhoods teams are placed in temporary locations. It is the aim of the MPS to establish additional Safer Neighbourhood bases in the Borough. Safer Neighbourhood Bases provide an opportunity for possible co-location with other enforcement and regulatory services.

#### *9.2.8 Custody Provision*

9.2.9 There are currently two custody locations in the Borough (Bethnal Green and Limehouse), both of which are in need of improvement, and are inadequate in relation to today's needs.

9.2.10 The MPS are seeking to establish a new Custody Centre in the Borough, which will comprise of 20-40 cells plus related facilities. These facilities need to be located in an easily accessible location and could be built as an extension of an existing facility. The MPS would ideally like to establish this facility close to the proposed Patrol Base (see below).

#### *9.2.11 Patrol Base*

9.2.12 Limehouse Police Station is currently used as a base for operational officers in the Borough. Current facilities are inadequate, inefficient and expensive to maintain. A single facility known as a Patrol Base is therefore sought in the Borough. As well as operational and support accommodation for officers, it will also include garaging and parking for operational and staff vehicles and allow a large number of vehicle movements. The facilities will not be accessible to the public. Potential sites for such a facility are being sought in the Borough.

#### *9.2.13 Office Facilities*

9.2.14 Current office facilities are located between two police stations (Bethnal Green and Limehouse) for more efficient and modern working practices the MPS are looking to reorganise and improve back-office facilities within a single office building in the Borough.

#### **9.2.15 The current Capital Investment Programme**

9.2.16 The MPS will shortly be undertaking a review as to how it can best provide policing services to the Borough and the wider East London area in response to population growth in the Thames Gateway, and how best to plan for the Olympics in 2012. This may affect the Borough-structure for delivering services as intended in the AMP referred to above.

9.2.17 Any programme of capital investment would also partly depend upon releasing assets from the MPS's current property portfolio. The value of this portfolio has suffered recently due to the wider fall in property values, and partly for this reason, and partly due to the possibility of the

way services may be delivered, any capital investment programme as described in the AMP will not be implemented in the immediate future.

9.2.18 The Police and the Council are seeking to establish a more effective dialogue regarding how their services can be delivered, specifically in relation to opportunities for shared locations of services where suitable, or better relationships and ways of working. Any new forms of service delivery and the capital programme needed to implement it, will be discussed and agreed with the Council and other key public service partners, to ensure any potential for co-location is realised.

### **9.3 Fire**

9.3.1 The London Fire Brigade (LFB) faces a number of challenges in relation to how and where it delivers its service. These are related to the growing threat of terrorism as well as the need to provide services to changing and growing parts of the City, especially in places such as Tower Hamlets, whilst providing these services from accommodation which is ageing, difficult to maintain, and often unsuitable for today's practices.

9.3.2 There are three interlinked pressures on investment for fire stations that need to be considered, 1) operational improvements, 2) property improvements, 3) releasing latent property value.

9.3.3 The LFB's approved Asset Management Plan (Property) 2009<sup>36</sup> aligns the use and requirements for property with the LFB's corporate objectives and responsibilities. The LFB is seeking to improve the way it uses property through targeted improvements and renovations, and enhance the value of its assets where there is an opportunity to do so.

9.3.4 The LFB provides services in Tower Hamlets from stations both within the borough itself and from neighbouring boroughs. Specifically within Tower Hamlets there are six fire stations – Bethnal Green, Poplar, Whitechapel, Bow, Millwall and Shadwell. Shadwell and Whitechapel stations rank as higher priority in terms of investment or improvement as they are currently below the ideal standard in terms of space and quality of the facility. Shadwell is to be rebuilt as part of a successful bid for PFI credits to replace 9 fire stations in the LFB portfolio.

9.3.5 Although the current facilities are adequate for present needs, any potential development opportunity that could facilitate improvement to our building stock and enhance the operation of the fire service would be welcomed and due consideration would be given to its merit and deliverable benefits. At present there are no infrastructure needs which need to be identified in the Core Strategy and the IDP.

## **9.4 Ambulance Service**

- 9.4.1 The London Ambulance Service NHS Trust (LAS) is the body responsible for providing Ambulance services across the capital. Its Strategic Plan 2006-07 to 2012-13 sets out how it will deliver its services between now and the Olympics in 2012.
- 9.4.2 There are factors which will affect how and where ambulance services are delivered. One is in regard to policy, such as the NHS Plan, the National Ambulance Review and the Health White Paper. The second group of factors are relating to the environment in which the service operates – such as changes in demand caused by population growth. It is this second group of factors which may impact on the infrastructure needs of the LAS.
- 9.4.3 The LAS Strategic Plan states that the growth planned in the Thames Gateway (including Tower Hamlets) will have a significant increase in demand. It calculates that the increase in population will lead to an additional 30,000 calls to the Ambulance Service by 2016, the equivalent to the average yearly workload of three ambulance stations. This has led to the LAS thinking about new ways to fund and deliver ambulance services in the Thames Gateway.
- 9.4.4 One solution is to work with NHS Tower Hamlets in order to pursue opportunities for co-location with PCT facilities. For this to be a practicable solution early engagement is needed between the LAS and NHS Tower Hamlets to identify where this could happen, as the LAS ideally needs to be located in areas of high demand and near to main roads. The Olympic and Paralympic Games also present a particular challenge with the influx of a large number of people in a short period of time.
- 9.4.5 The Ambulance Service is beginning to address these issues through the Implementation Section of the Capital Plan, through its 'Improving our Response' Model. This project includes both operational planning as a result of the Olympic and Paralympic Games, and operational planning as a result of the increase in population in the Thames Gateway. This plan is not as yet significantly developed enough to know the specific infrastructure requirements this would have on Tower Hamlets, and at this stage the LAS do not require a spatial planning response from the Council. These increases in demand are likely to have a more significant impact on the workforce needed to provide the service (plus the ambulance fleet), than infrastructure of the type relevant to this IDP. In relation to funding, a model exists within the LAS to link increases in demand to resource requirements. This will inform planning assumptions and the level of funding required from NHS Tower Hamlets.

## **9.5 Civil Contingency**

- 9.5.1 Civil contingency measures for Tower Hamlets are managed through regional working as part of the London Resilience Group. This reflects the need to plan and prepare for major incidents at a cross-borough level and to respond effectively to incidents which may affect different areas at the same time.
  
- 9.5.2 Continued population growth will require London Resilience to update its plans regularly. Additional storage and shelter capacity as well as emergency equipment may be required within Tower Hamlets to cater for an increased population, but this is contingent on regional and sub-regional planning. The IDF will be updated to reflect population growth-driven civil contingency requirements as London Resilience planning develops.

## **10 Delivery**

### **10.1 Monitoring and Updating**

10.1.1 This IDP has been produced so that, alongside the PPC&G Model, it can be a live tool which can be updated through active monitoring to inform service and spatial planning decisions.

10.1.2 This is the first IDP and therefore is at the beginning of a process to integrate the capital investment programmes of various services with planning for new development. The baseline position within this IDP will allow the Council and its partners in the LSP to continue to prioritise spending and address funding gaps over the lifetime of the Core Strategy.

10.1.3 As this is the first IDP the Council has produced, it is intended that subsequent versions will be able to draw upon the monitoring and management processes that will be established which will allow more accurate costs, priorities and needs to be identified, as the monitoring and updating process established through this IDP matures.

10.1.4 Systems are being established which will update the PPC&G Model quarterly, with the results and impacts on infrastructure requirements being fed through to the Asset Management & Capital Strategy Board (the body responsible for directing capital investment) and individual service planning. The IDP will also be updated annually to review progress, as part of the Annual Monitoring Report, and review priorities for the next year.

### **10.2 Governance Arrangements**

10.2.1 The Infrastructure Plan, and its subsequent updates, will be reported regularly through the Council's Asset Management & Capital Strategy Board. This group includes representatives from the key Council services, as well as other strategic partners including the Housing Arms Length Management Organisation (Tower Hamlets Homes), the Primary Care Trust, the Police and the local NHS Trust.

10.2.2 This group collectively makes the key decisions regarding capital projects in the Borough, and is therefore the most appropriate body to discuss infrastructure planning and investment. The Infrastructure Plan and Schedule will inform a project plan, the progress of which will be monitored and reported to the Group. Officer resources are currently being identified to monitor and manage the progress of the Infrastructure Plan.

### **10.3 Linking infrastructure development to the location of growth**

10.3.1 This section shows how the location and timing of new infrastructure relates to the location and timing of growth illustrated by the projected

housing developments by each LAP taken from the PPC&G Model. This identifies how planned infrastructure underpins the growth targets within the Core Strategy.

10.3.2 Figure 28 below shows that the majority of new infrastructure is planned for the paired LAP areas of 5&6 and 7&8. This is where over 29,000 out of a total of over 43,000 new housing units are projected to be located. There is a significant proportion of infrastructure being built in LAPs 5&6, reflecting that it is an area identified for high levels of growth in the Core Strategy (see Figure 4.3a of the Core Strategy DPD), due to the amount of land available for new housing. This is through a combination of more intensive housing in areas around the Central Activity Zone of Canary Wharf, and a large provision of new housing on mainly former employment land in the east of the Borough. However new infrastructure is also needed in other areas and across the Borough where there is housing-led regeneration, and new infrastructure needed to provide for current shortages in capacity.

**Figure 28: Infrastructure Development and Housing Growth**

<b>Paired LAP</b>	<b>Time</b>	<b>Growth (higher density scenario)</b>	<b>Infrastructure</b>
<b>Borough-wide</b>			Waste Facility Crossrail East London Line Utilities Upgrades Sewer and mains replacements
<b>LAP 1&amp;2</b>	2010-2015	3,336	1 x health facility
	2015-2020	3,496	3 x health facility New open space – Spitalfields & Shoreditch 1 Idea Store Local (option of)
	2020-2025	1,989	
		<b>8,821</b>	
<b>LAP 3&amp;4</b>	2010-2015	1,060	1 x health facility High Street 2012
	2015-2020	2,982	4 x health facility Whitechapel station upgrade New open space – Aldgate 1 Idea Store Local (option of)
	2020-2025	442	
		<b>4,484</b>	
<b>LAP 5&amp;6</b>	2010-2015	3,121	2 x health facility High Street 2012 A12 Interventions Bow Interchange crossings St. Paul's Way highway works
	2015-2020	4,514	2 x health facility 1 x primary school



			1 secondary school Hackney wick Interchange A12 Interventions Bromley-by-Bow station upgrade New open space – Fish Island, Bromley-by-Bow 1 swimming pool (to remain under review until Olympic impact can be determined) 1 sports hall 1 Idea Store Local
	2020-2025	570	Idea Store (option of)
		<b>8,205</b>	
<b>LAP 7&amp;8</b>	2010-2015	6,406	2 x health facility A12 Interventions Millennium Quarter transport and infrastructure works
	2015-2020	10,427	4 x health facility 2 Primary School (option of) A12 Interventions New Open Space – Leven Road 1 swimming pool 2 sports halls
	2020-2025	4,798	
		<b>21,631</b>	
		<b>43,141</b>	

\*Does not include planned expansions of existing primary schools.

## **10.4 Opportunities for Co-location**

- 10.4.1 The co-location of public services such as schools, libraries and leisure centres into multi-use buildings or sites is a concept which offers a number of advantages both to residents in the form of conveniently located, accessible ways of accessing Council services, and advantages to the Council in that it can provide a more efficient way of planning for and delivering council services.
- 10.4.2 The Local Strategic Partnership brings together the council with other stakeholders such as the NHS Tower Hamlets and the Police which presents the opportunity to discuss and progress co-located facilities. The co-location concept is being explored and progressed through the Asset Management Board and the Asset Management Strategy. This will potentially include education, health, sport and leisure and library services. The Asset Management Strategy and the Channel Strategy will also lead the delivery of community facilities and frontline Council services, and also the Metropolitan Police Safer Neighbourhood Bases.
- 10.4.3 The IDP makes references to co-location in the service-specific sections, with the table below taking this one step further and through using the location and types of new facilities included in the IDP Schedule, suggests where there are specific opportunities for co-located social infrastructure.

Figure 29: Potential co-located services

LAP	Place	Location of new infrastructure – potential co-located services shown in bold.
LAP 1 & 2	Shoreditch	Health facility (alternative to Bethnal Green)
	Spitalfields	
	Bethnal Green	Health Facility (Dunbridge St.) Health facility (alternative to Shoreditch) Idea Store (option of)
	Globe Town	Health facility
LAP 3 & 4	Aldgate	Health facility
	Tower of London	
	Wapping	Health facility
	Whitechapel	Health facility
	Stepney	
	Limehouse	Health facility (Alternative to Poplar)
	Shadwell	Idea Store (option of)
LAP 5 & 6	Victoria Park	
	<b>Fish Island</b>	<b>Primary School (option of)</b> <b>Health facility</b> <b>Secondary School (alternative to Mile End)</b>
	Bow	<b>Health Facility (alternative to Mile End)</b> <b>Swimming pool (to remain under review)</b> <b>Sports Hall</b>
	<b>Bromley-by-Bow</b>	<b>Primary School (option of)</b> <b>Idea Store (option of)</b> <b>Health Facility</b>
	<b>Mile End</b>	<b>Health facility (alternative to Bow)</b> <b>Secondary School (alternative to Fish Island)</b>
	Bow Common	Health Facility
	LAP 7 & 8	<b>Poplar Riverside</b>
<b>Poplar</b>		<b>Health Facility</b> <b>Health facility (alternative to Limehouse)</b> <b>Sports Hall</b>
Leamouth and Blackwall		
Canary Wharf		Health facility
<b>Millwall</b>		<b>Health Facility</b> <b>Health facility (alternative to Cubitt Town)</b> <b>Primary School</b>
<b>Cubitt Town</b>		<b>Health facility (alternative to Millwall)</b> <b>Sports Hall</b>

## 10.5 Land Costs

10.5.1 The IDP has included the cost of new infrastructure where it is appropriate and reasonable to do so. The methodology for this is outlined in Appendix 1. These costs relate to the capital expenditure needed to build the infrastructure, and do not include the cost of land. However land costs need to be considered as they can often be significant due to the price of land relative to the cost of infrastructure, and the space that some infrastructure requires.

10.5.2 We have chosen to take an approach towards land costs that identify in generic terms what the price of land is the Borough, depending on key variables (location and current use), rather than specific land costs for each infrastructure item. This approach has been taken as the IDP does not identify specific locations for infrastructure (using areas of search) and so accurate land costs cannot be provided. In addition to this there are varying ways in which infrastructure can be constructed and delivered which will greatly affect land costs. For example sports halls may be a stand-alone facility, which will require land, or could be part of a BSF scheme, using an existing Council-owned site. These decisions have not yet been made, and therefore a land cost tool that allows us to inform the infrastructure planning process, rather than specify costs only suitable for a specific method of delivery, in a specific location, at a specific time, was not judged to be a suitable nor useful method.

10.5.3 This section identifies a set of generic land values for the Borough for four broad areas within the Borough including:

- City Fringe
- Docklands
- East – Lea Valley Industrial Area
- Rest of Borough

10.5.4 Figure 30 identifies the generic land values for different parts of the Borough and for different uses. These values are sourced from office and industrial agents who are active in this area of London. They base their professional judgement of land values on transactional evidence and, where transactional evidence is limited, upon their knowledge of rents and yields from which values can be derived. The land values shown are August 2009 values.

**Figure 30: Indicative Generic land Values**

Use Class	Indicative Land Values (£s per hectare)			
	City Fringe	Docklands	East	Rest of Borough
B1 offices	£0 - £5m	£0 - £4m	Low	Low
B2	£2.5m	N/A	£2m	£2.2m
B8	£2.5m	N/A	£2m	£2.2m

### **10.5.5 B1 Offices**

10.5.6 At the current time, there is very little transaction evidence on B1 offices. This is because low rents and high yields mean that technically land has negative value at present. That is of course not the case in reality. In the City sales tend to stop when values drop to less than £50 per sq ft (£5.38m per hectare) so it is fair to assume that land values are around or below this level. Docklands offices are at a discount to the City, with lower rents and slightly higher yields, so land values will be lower. In the East and rest of Borough, office rents are lower and yields higher, resulting in technical negative land values. Consequently, transactional activity is very limited. If any sales could be achieved, they would result in values much lower than those that could be achieved in the City and Docklands.

### **10.5.7 B2/B8 Industrial**

10.5.8 Average across the Borough would be c. £800k per acre (£2m per hectare). Land values tend to decrease as you move away from the City, so City Fringe areas may see values of c. £1m per acre (£2.5m per hectare), falling to £900k per acre (£2.2m per hectare) around Rest of Borough down to say £700-750k per acre (c. £1.8m per hectare) when you reach the East. There is very little industrial activity in Docklands so difficult to judge an industrial land value here.

## **11 The Infrastructure Schedule**

11.1.1 This schedule includes the key pieces of infrastructure required by the Core Strategy over the lifetime of the Plan.

**Figure 31: Infrastructure Delivery Schedule**

Item	Linked to CS growth? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/contingency
<b>Health</b>									
Up to 19 primary and community care schemes.	Yes SP06	Critical	Tower Hamlets PCT	Mixture of mainstream capital funding, 3 <sup>rd</sup> party development. LIFT joint venture, and planning obligations	See Figure 13 for breakdown of health facility costs.	Through the new provision of health care at locality and network model. Areas of search include 3 schemes in LAP 1&2, 4 in LAP 3&4, 3 in LAP 5&6 and 6 in LAP 7&8.	14 schemes by 2015, 2 scheme 2015 - 2020, 3 schemes 2020-2025.	TH PCT IH&W Strategic Programme Business Case Version 12 (Oct. 2008).	Non-delivery to trigger review of relevant DPD. Risks in relation to funding and uncertainty of development schemes. Mitigation: review the number of schemes, and review funding sources.
<b>Education</b>									
Up to 8FE of primary school provision by 2017 through expansion or new provision.	Yes SP10	Critical	LBTH Children's Services through the Primary Capital Programme, LBTH Planning	PCP, basic need and modernisation fund, pooled developer contributions. Delivered by a London Enabling Partnership (LEP)	New build primary school (2FE) with external space - £5.164m-£7.064m.  New build primary school (2FE) without external space - £5m-£6.9m.	Areas of search are Bromley-by-Bow, Poplar Riverside, Fish Island and the Isle of Dogs	By 2017.	Primary Capital Programme	Projections to be kept under review and plans may need to be accelerated. Risks in relation to funding and the demand for places. Contingency through

Item	Linked to CS growth? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/contingency
					Extension to existing primary school (for an additional 1FE) - £3.175m-£4.3m.  Refurbishment and extension of existing primary school (for an additional 1FE) - £2.9m-£5.25m.				examining expansion rather than new provision. Pursue other funding sources. Monitor places through housing completions and the PPC&G Model.
1 8FE or 13FE Secondary School.	Yes SP10	Critical	LBTH Children's Services	BSF Wave 5, through the LEP.	BSF Wave 5 funding envelope: £37.98m Capital expenditure for new school.	Areas of search are Fish Island, Mile End, Bromley-by-Bow.	By 2017	BSF – Pupil Place Planning Statement Jan 08. BsF Strategy for Change Part 2	Projections to be kept under review and plans may need to be accelerated
Post 16 – a required growth in school based provision of 850 places by 2017	Yes SP10	Critical	LBTH Children's Services	BSF Wave 5, through the LEP.	BSF Wave 5	Provide 400 places in Morpeth, Oaklands and Swanlea Sixth Form and 450 places in Raines Foundation, SJC, Mulberry and Central Foundation, George Greens, Bishop Challoner and the East Collaborative.	By 2015	BSF – Pupil Place Planning Statement Jan 08	Projections to be kept under review and plans may need to be accelerated



Item	Linked to CS growth ? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/ contingency
<b>Transport &amp; Connectivity</b>									
Crossrail	Yes SP11	Critical	Crossrail / TfL	Crossrail, DfT/Central Government, TfL, Planning obligations, business rates	£15.9bn.	Borough-wide	2017	Crossrail Bill	Non delivery would significantly impact upon Core Strategy objectives and trigger a review of the relevant DPD(s)
Hackney Wick Interchange (Station upgrade and public realm improvements).	Yes SP11, SP27	Necessary	LBTH / LBH / LTGDC are key project stakeholders.	Hackney Wick / Fish Island Masterplan / Forthcoming Feasibility Study, Potentially part of TfL Sub Regional Plan for East London scheme	Feasibility Study forthcoming to identify costs.  Funding package to include TfL, LTGDC, LBTH, LBH, planning obligations is being prepared.	Fish Island	2020	Hackney Wick / Fish Island Master Plan	The degree of significance of the new station and associated works is to be tested through the feasibility work. Non-delivery of these are expected to impact significantly on the development potential, and so would trigger a review of the relevant DPD.
High Street 2012 work package	SP12	Preferred	LBTH / LBN / LTGDC / LDA / TfL / English	Funding to come from LBTH / LBN / LTGDC / LDA / TfL / English	Currently £20.7m headline costs.	Borough-wide	Some Pre 2012, others 2010-2015.	High Street 2012 Project	Risks in relation to funding sources which

Item	Linked to CS growth ? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/ contingency
			Heritage	Heritage / Planning obligations.					may trigger review of project specification. Project not considered critical to delivery of CS.
Fish Island / A12 / River Lea / Poplar Riverside connections	Yes SP27, SP28, SP30, SP33	Necessary	LTGDC / ODA / potential scheme TfL / LBTH	Hackney Wick / Fish Island Master Plan, LMF/ potential TfL Sub Regional Plan for East London scheme, emerging Olympic Park SPG.	Feasibility of schemes to be completed. Projects costed to date total £13.2m, with outline costs for the remainder (classified as low, medium, high and very high).  Planning obligations, TfL, LTGDC, LDA	LAP 5&6, LAP 7&8	2010-2026	Hackney Wick / Fish Island Master Plan, LMF.	Non delivery to trigger review of relevant DPD and growth targets in the affected areas.
Whitechapel Station Interchange project	SP11, SP21	Preferred	Crossrail / TfL	Whitechapel Master Plan / potential TfL Sub Regional Plan for East London scheme.	Crossrail, TfL, planning obligations. £3.7m for public realm/junction works. Cost for station upgrade to be identified.	Whitechapel	2017	Whitechapel Master Plan	Delivery would require support from partners, specifically TfL. Non-support would require review of relevant Master Plan objectives.
Bromley-by-Bow station upgrade	Yes SP11, SP30	Necessary	LBTH / LTGDC / LDA / TfL	Bromley-by-Bow Master Plan and Implementation Plan /	Initial costs for enhancement/new station are £68-	Bromley-by-Bow	2015-2020	Bromley-by-Bow Master Plan and	Potential non-delivery would lead to reviewing

Item	Linked to CS growth? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/contingency
				potential TfL Sub Regional Plan for East London scheme	105m (subject to review)  TfL, S106, DCLG, Growth Area funding			Implementati on Plan	master plan and proposed growth assumptions in the relevant DPD.
Bow Interchange crossings	SP28	Necessary	LBTH / TfL	Potentially to become part of the Bromley-by-Bow Master Plan when it is reviewed.	£1.1M	Bromley-by-Bow	Pre 2012		Potential non-delivery would lead to reviewing relevant DPD growth assumptions and master plan content.
Millenium Quarter transport and infrastructure works	Yes SP11	Necessary	LBTH	All of the costs met by commercial and residential landowners.	£27.7m of transport and infrastructure costs (2002 prices)	Millwall	By 2015	Millenium Quarter Master Plan	Funding already identified and works underway. Risk to future funding would lead to review of project objectives.
St. Paul's Way	SP12	Preferred	LBTH / PCT / Poplar Harca	Planning obligations, TfL Area-based funding, plus other capital costs if available.	Initially £1m of highway/streetscap e improvements. £500k identified to date.	Bow Common	By 2015	St. Paul's Way transformatio nal projects.	Potential risk to funding sources. Contingency is to identify alternative funding sources, or lead to review of project specification.
Leamouth Pedestrian/Cycle	Yes SP12	Critical	Developer, LTGDC, LBTH,	Funded through regeneration of	£8m	Leamouth	By 2015		Non-delivery of bridge would

Item	Linked to CS growth ? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/ contingency
Connection			LB Newham, TfL	Leamouth Peninsula					mean reviewing development assumptions and relevant DPD.
Aspen Way Connections	Yes SP12	Preferred	Through the forthcoming Aspen Way Master Plan. LBTH, Canary Wharf Group, seeking support from TfL and HCA	Likely to be funded through development at Canary Wharf	Not currently identified, but costs are expected to be significant.	Canary Wharf / Blackwall / Poplar	By 2020		Aspen Way Master Plan brief currently in development. Currently aspirational project, not critical to delivery of CS objectives.
<b>Utilities, waste and flooding</b>									
Waste	Yes SP08	Critical	LBTH and Contractor (to be identified)	Tendering process to begin November 2009	See Figure 18 for breakdown of indicative waste facility costs.	Potential sites have been identified within the following areas of search: Poplar Riverside, Bromley-by-Bow, Fish Island.	By 2015	Waste Strategy Baseline Report	Non delivery would require a review of the relevant DPD.
<b>Publicly Accessible Open space</b>									
Leven road	SP07	Critical	LBTH	Through the Site and Place Making DPD	£2.7m	LAP 7	2010-2015	An Open Space Strategy for LBTH 2006-2016, Green Grid Project	Non delivery of new open space would lead to review of growth targets and policies in the relevant DPD

Item	Linked to CS growth? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/contingency
Bethnal Green	SP07	Critical	LBTH	Through the Site and Place Making DPD	£0.9m	LAP 1	2010-2015		Non delivery of new open space would lead to review of growth targets and policies in the relevant DPD
Fish Island	SP07	Critical	LBTH	Through the Hackney Wick/Fish Island Master Plan	Outline costs £1.1m, detailed costs to be identified through the master planning process.	LAP 5	2015-2020	Hackney Wick Fish Island Master Plan	Non delivery of new open space would lead to review of growth targets and policies in the relevant DPD
Bromley-by-Bow	SP07	Critical	LBTH	Through Bromley-by-Bow Master Plan and Implementation Plan	Outline costs £1.6m, detailed costs to be identified through detailed feasibility study (2009)	LAP 5 & 6	2015-2020	Bromley-by-Bow Master Plan.	Non delivery of new open space would lead to review of growth targets and policies in the relevant DPD
Aldgate	SP07	Critical	LBTH	Through Aldgate Master Plan	Some works complete. Total costs to be £2.35m.	LAP 3	2010-2015	Aldgate Master Plan	Non delivery of new open space would lead to review of growth targets and policies in the relevant DPD
Spitalfields and Shoreditch	SP07	Critical	LBTH	Through Bishopsgate Master Plan	Outline costs £2.5m. Detailed costs to be identified as part of detailed master	LAP 1 & 2	2020	Bishopsgate Master Plan	Non delivery of new open space would lead to review of growth targets and

Item	Linked to CS growth ? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/ contingency
					planning process.				policies in the relevant DPD
Victoria Park Master Plan	SP07	Preferred	LBTH	Heritage Lottery Fund (£5m), LBTH Capital (£5m).	£10m	LAP 5 & 6	2020	Victoria Park Master Plan	Funding yet to be approved. Non-approval would lead to review of Master Plan.
Millwall Park Draft Master Plan	SP07	Critical	LBTH	Costs and funding to be identified.		LAP 7 & 8	2020	Draft Millwall Park / Mudchute Park Master Plan.	Funding yet to be approved. Non-approval would lead to review of Draft Master Plan.
Open Space Strategy Improvement Programme	SP07	Critical	LBTH	Through the Open space Strategy implementation. Funding from LBTH capital, planning obligations, and other sources.	£6m (approx. – based on cost of first phase ).	Borough-wide	By 2015	2006 Open Space Strategy, plus forthcoming refresh.	Risk to accessing funding sources. Contingency is to pursue alternative funding sources or review the improvement programme.
<b>Leisure and cultural infrastructure</b>									
Swimming Pools: Supply, demand and quality analysis has identified a need for up to 2 additional swimming pools by 2020	SP06	Preferred	LBTH Communities Localities and Culture. Work with the BSF programme to investigate dual use can be	LBTH Capital Funding, Planning Obligations, external funding sources to be identified.	Total costs for wet and dry facility: £9.25-£11.55m  Conversion of existing facilities for sports hall use:£5.9m	Primarily needed in the east and north east of the borough.  East of the borough – Poplar area.  North East of the	By 2020	Sporting Places – A Leisure Facilities Strategy for the LBTH (draft).	Further analysis once impact of new sports facilities provided by the LMF are known. Risk to funding or site would lead to

Item	Linked to CS growth? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/contingency
			provided		Stand-alone swimming pool:£8.8m	Borough – consideration with the Victoria Park Master Plan..			review of relevant Strategy to identify alternative provision.
Initial planning to consider 3-4 additional sports halls.	SP06	Preferred	LBTH with contracted partner (currently GLL)	LBTH Capital Funding, Planning Obligations, external funding sources to be identified. Provision through co-location with BSF.	Total costs for wet and dry facility: ££11.55m - £13.9m  Cost of stand-alone sports hall: £2.735m	Needed primarily in the north of the Borough and the Isle of Dogs	By 2020	Sporting Places – A Leisure Facilities Strategy for the LBTH (draft).	Further analysis once impact of new sports facilities provided by the LMF are known. Risk to funding or site would lead to review of relevant Strategy to identify alternative provision.
Up to 3 Idea Stores Local	SP10	Preferred	LBTH	LBTH Capital Funding, Planning Obligations, external funding sources to be identified.	Total cost for new build (stand-alone):£3.3m-3.6m  Total cost for new build (mixed use): £3.2m-3.6m	Areas of search include Cubitt Town, Shadwell, Bethnal Green, Bromley-by-Bow	1-2 in 2015-2020, a third by 2025	Idea Store Strategy (Draft).	Risk of funding or delivery would mean reconfiguration of other developments to deliver the required library space.
<b>Utilities, Flooding</b>									
Electricity – sub-station upgrades in Bow and Isle of Dogs, West Ham	Yes	Necessary	National Grid	Developers and service providers, through the Development Management process.	National Grid responsible for costs and funding.	Bow, Isle of Dogs	To be delivered in line with development.	2004 Utilities Study	Risk mitigation through ongoing monitoring of development assumptions and

Item	Linked to CS growth? (Y/N & policy)	Priority (critical, necessary, preferred)	Who? (lead and other delivery partners)	How? (delivery mechanism)	Cost	Where? (location)	When? (timescale)	Baseline source	Risks/contingency
									liaison with providers and developers.
Gas – local infrastructure work may be needed in Isle of Dogs	Yes	Necessary	National Grid	Developers and service providers, through the Development Management process.	National Grid responsible for costs and funding.	Isle of Dogs	To be delivered in line with development.	2004 Utilities Study	Risk mitigation through ongoing monitoring of development assumptions and liaison with providers and developers.
Water – Thames Tunnel Project, Sewer Improvement Projects, Victorian Mains Replacement and maintenance projects.	Yes SP04	Necessary	Thames Water	Thames Water	Thames Water, subject to Ofwat funding	The Thames Tunnel will be constructed and located under the River Thames, from West London to Beckton Sewage Treatment Works, and will include connections to the Holloway Storm Relief and North East Storm Relief Combined Sewer Overflows; both located in the borough.	The anticipated completion date for the Thames Tunnel is 2020.	Thames Water Business Plan 2010-2015	Risk to funding. Contingency is to review capital programme and assess priorities for investment.
Flooding – Surface water drainage improvements	Yes	Necessary	Environment Agency	Responsibility of riparian owners with cooperation from Environment Agency	To be confirmed when project is specified in more detail	Leven Road	Te be confirmed in negotiation with LBTH	TE2100, LB Tower Hamlets SFRA.	Risk to funding. Contingency is to review capital programme and assess priorities for investment.



## List of References

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## **Appendix 1: Costs Report**