

East Cambridgeshire
Community Infrastructure Levy
Infrastructure Study

December 2011

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Section 1: Introduction & Growth Context

1. Introduction

- 1.1 East Cambridgeshire is a predominantly rural district located to the north-east of Cambridge. The district contains three market towns, Ely, Soham and Littleport, and 50 other villages and hamlets varying in size, including the fringe areas of Newmarket.
- 1.2 The East Cambridgeshire Core Strategy (adopted October 2009) sets out the vision and strategic policies to guide the general direction of future development in East Cambridgeshire. Importantly the Core Strategy identifies that over the period 2001 to 2025, 10,230 new homes will need to be delivered and 6200 additional jobs generated. The majority of development will take place in the towns and most sustainable villages, dependent on their role as employment, retail and service centres, their level of accessibility, and particular environmental and infrastructure constraints. The Core Strategy makes clear that this growth and regeneration will need to be supported by new and improved infrastructure.
- 1.3 The East Cambridgeshire Core Strategy (2009) establishes the principle that developers should contribute towards infrastructure provision. Policy CS7 states that the District Council will seek to secure adequate infrastructure and community services and facilities through developer contributions and planning obligations. Policy S4 provides further detail on the Council's approach to seeking developer contributions, and states that development proposals will be expected to:
- Provide or contribute towards the cost of providing infrastructure and community services/facilities made necessary by the proposal
 - Where appropriate, contribute towards the on-going maintenance and management of services and facilities provided as part of (a)
 - Offset the loss of any significant amenity or resource through compensatory provision elsewhere.

Policy S4 states that infrastructure may include:

- Affordable housing
- Education and care provision
- Public open space, sport and recreational facilities
- Strategic green infrastructure
- Health and social care
- Community facilities (including meeting halls, library services, youth activities, and cultural services)
- Utilities infrastructure
- Nature conservation and wildlife mitigation measures
- Town/village centre improvements

- Transport (including footpaths, cycleways, bridleways, highway infrastructure, public
- transport, community transport, car parks and travel planning)
- Drainage/flood prevention
- Waste/recycling facilities
- Public art

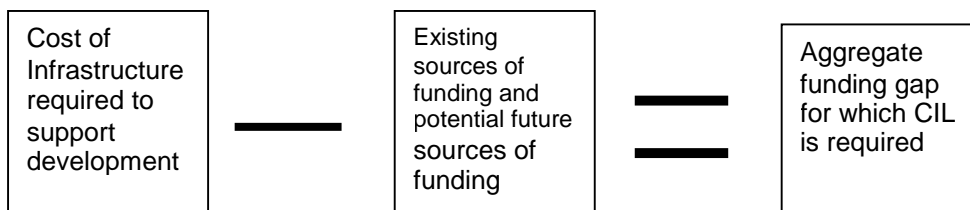
COMMUNITY INFRASTRUCTURE LEVY

- 1.4 The Community Infrastructure Levy (CIL) is a new standard charge which local authorities in England and Wales can charge on most types of new development in their area. CIL charges will be based on the size, type and location of the development proposed. The money raised will be used to pay for infrastructure required to support development in a District.
- 1.5 The Government believes that a CIL is a fair and transparent way in which new development can contribute to infrastructure provision. It is set locally, in a Charging Schedule by Charging Authorities (Local Planning Authorities) based upon local evidence of infrastructure need and viability and once adopted is a mandatory charge on all qualifying development except in exceptional circumstances. Policy S4 of the Core Strategy was drafted and adopted prior to Government introducing enabling legislation for the CIL. However, the policy anticipates the introduction of CIL, and states that developer contributions may include contributions to meet any future Community Infrastructure Levy.
- 1.6 The CIL Regulations introduced in April 2010 and amended in April 2011 contain measures to reduce the use of Section 106 agreements to fund infrastructure. The first measure (Regulation 122) which came into force on the 6th April 2010 requires Section 106 agreements to meet the following tests:
- necessary to make the development acceptable in planning terms;
 - directly related to the development; and
 - fairly and reasonably related in scale and kind to the development.
- 1.7 A second measure introduced in the regulations restricts the use of planning obligations to require funding for pooled contributions towards infrastructure. The regulations only allow for a maximum of 5 planning obligations to contribute to a certain infrastructure project or type of infrastructure. For example, only five planning permissions for development will be able to have planning obligations that require financial contributions to off-site open space in a locality. After this no more pooled contributions towards off-site open space provision would be allowed in the District. This power will come into force in April 2014 or when a Local Planning Authority's charging schedule comes into force. Where a charging schedule is in place, a planning obligation cannot be used to require funding for a piece of infrastructure that is listed as being funded by CIL.

- 1.8 The above restrictions mean that it will not be possible for the Council to pool developer contributions towards infrastructure provision through the use of Section 106 contributions. Therefore East Cambridgeshire District Council plans to introduce a Community Infrastructure Levy (CIL), in order to secure fuller contributions from developers towards local and sub-regional infrastructure investment. The levy will involve setting standard charges (tested through an independent examination) and will largely replace the current planning obligations or S.106 system. However Section 106 Agreements will continue to be used for local infrastructure requirements on development sites.

PURPOSE OF THIS STUDY

- 1.9 The purpose of this study is to provide evidence of infrastructure need to justify the need for a Community Infrastructure Levy in East Cambridgeshire. Regulation 14 of the CIL regulations states that Charging Authorities, when setting the rate of a CIL, need to aim to strike a balance between the desirability of funding infrastructure through CIL and the effects of the imposition of CIL on economic viability of development. Following from this, guidance set out by the Government in “Community Infrastructure Levy Guidance: Charge Setting and Charging Schedule Procedures” (March 2010) requires Charging Schedules to be justified by evidence of infrastructure need and economic viability.
- 1.10 New and improved infrastructure will be required in the District to support future development. However, the above mentioned documents do not adequately quantify this need in order to support the introduction of CIL. The above mentioned Government guidance states that evidence that outlines an aggregate funding gap for infrastructure provision is needed to support the introduction of a CIL. In identifying a funding gap, the evidence base should identify and cost infrastructure that is needed to support growth along with other existing and likely future sources of funding. The below equation summarises this.



- 1.11 This study therefore looks in detail at the likely infrastructure that is required to support the development planned in the East Cambridgeshire LDF. It identifies the likely cost of provision and any existing or potential funding for infrastructure. Importantly it identifies a funding gap that CIL will be required to address.
- 1.12 It is important to note that the role of this study is not to provide absolute upfront assurances as to how the Council intend to spend future CIL funds, but rather to illustrate that the Council’s intended CIL target is justifiable given

local infrastructure needs. Government guidance makes clear that in the interests of flexibility, Councils may spend their CIL revenues on different projects and types from those identified as indicative in infrastructure studies prepared for the purpose of introducing a CIL. The rationale behind this is that priorities of the Council and its partners may change over time. Clearly many of the projects identified in this study as needing CIL funding will likely be funded through CIL in order to ensure the planned development in the LDF is actually delivered.

- 1.13 Production of this study has involved consultation with local stakeholders and delivery providers. The methodology used is heavily based on that used in the East Cambridgeshire Infrastructure Investment Framework (IIF), which was commissioned by the Council in 2009, produced by AECOM and completed in February 2011. The Infrastructure Investment Framework looked at the implications of three different growth scenarios on infrastructure requirements. This study just looks at potential rates of growth arising from the Councils adopted Core Strategy – as this is the document on which CIL will be based. These figures have been updated to capture new 2011 data on completions and outstanding commitments.
- 1.14 This study will form the evidence base for a future CIL charging mechanism to support wider infrastructure delivery. In addition to this study, a further study which examines the economic viability of development in the District has been commissioned. This will ascertain the level of CIL development can afford to pay. These two studies together will form the core of evidence base supporting the introduction of a CIL in East Cambridgeshire.

REPORT CONTENT AND STRUCTURE

- 1.15 This report identifies the infrastructure requirements associated with the delivery of Core Strategy levels of growth, the cost of delivering that infrastructure and the potential implications for delivery over time. The assessment of infrastructure requirements is set within a policy context and has involved consultation with local stakeholders and delivery providers.
- 1.16 The remainder of this report is based on the following chapters:
- An overview of the **housing projections** (Chapter 2)
 - A detailed summary of the **housing size and tenure mix** assumptions which underpin the study (Chapter 3)
 - The **population impacts** associated with Core Strategy growth levels (Chapter 4)
 - A detailed summary of the **employment** assumptions which underpin the study (Chapter 5)
 - A review of the **education infrastructure** necessary to support growth requirements (Chapters 6)
 - A review of the **healthcare infrastructure** necessary to support growth requirements (Chapters 7)

- A review of the **emergency services infrastructure** necessary to support growth requirements (Chapters 8)
- A review of the **community infrastructure** necessary to support growth requirements (Chapters 9)
- A review of the **sports and recreation infrastructure** necessary to support growth requirements (Chapters 10)
- A review of the **open space and green infrastructure** necessary to support growth requirements (Chapters 10)
- A review of the **transport infrastructure** necessary to support growth (Chapter 12)
- A review of the **utilities infrastructure** necessary to support growth (Chapter 13)

Note:

1. This is a high level strategic study – as individual sites come forward they will be assessed on their own merits by East Cambridgeshire District Council and be subject to transportation and environmental assessments as required which will determine the requirements in terms of mitigations and contributions as part of the planning process.
2. All highways costs produced in this report are “indicative” as appropriate for this strategic document.
3. This assessment assumes that development is possible in a way that is environmentally acceptable. It is recognised that further assessments are likely to be required for individual sites within the scenarios set out.

2. Housing Projections

GROWTH AREAS

- 2.1. As the current statutory development plan for the District, the Core Strategy housing targets and related population projections have been used to inform calculations of infrastructure needs in this document. The three market towns of Ely, Soham and Littleport will be the focus of the majority of development activity.
- 2.2. Five sub-areas have been identified to reflect the different growth and infrastructure requirements. The five sub-areas reflect the fact that the majority of growth will take place in the market towns and that outside of the Market Towns more modest growth will take place reflecting different infrastructure requirements in these locations. The five sub-areas are:
- Ely (city only)
 - Soham (Town only)
 - Littleport Parish
 - Rest of district north: (including parishes of Coveney, Haddenham, Isleham, Mepal, Little Downham, Little Thetford, Soham, Stretham, Sutton, Wentworth, Wicken, Witcham, Wilburton, Witchford and the rest of Ely parish outside the city)
 - Rest of district south: (including parishes of Ashley, Bottisham, Brinkley, Burrough Green, Burwell, Chippenham, Cheveley, Dullingham, Fordham, Kennett, Kirtling, Lode, Reach, Snailwell, Stechworth, Swaffham Bulbeck, Swaffham Prior, Westley Waterless and Woodditton)

Outstanding Housing Growth

- 2.3. Table 2-1 sets out the total number of new dwellings likely to come forward over the Core Strategy period between 2001 & 2025 and, the distribution of growth based on the Core Strategy spatial strategy.

Table 2-1: Distribution of the growth scenario (2001/02-2024/25)

5 Sub Areas		Settlement Hierarchy	
Ely	3,368	Market Towns	7,388
Soham	2,390	Key Service Centres	
Littleport	1,630	Bottisham	224
Rest of District North	1,757	Burwell	511
Rest of District South	1,814	Haddenham	162
		Newmarket Fringe	136
		Sutton	487
		Other Areas	2,050
Total	10,958	Total	10,958

These housing figures are built up from:

- Completions
- Outstanding commitments

- Windfalls (including commitments on small sites)
- Large potential sites within the settlement boundary
- Potential housing opportunities outside the settlement boundary

Between 2001/02 and 2010/11, there were 5,681 completions across East Cambridgeshire. These were predominantly in Ely (with 2,203 completions).

- 2.4. In addition there are a significant number of sites, as at March 2011, that have planning permission but where development has not commenced. Under CIL Regulation 128, any development that is approved by grant of full or outline planning permission is exempt from CIL if, on the date of approval, there is no Charging Schedule in operation. In view of the procedures required to adopt a CIL Charging Schedule including a formal examination, it is estimated that the East Cambridgeshire CIL Charging Schedule may not be in place until late 2012 at the earliest. It is therefore assumed, for the purposes of this study, that all sites with planning permission will not pay the CIL charge. It should be noted that in assessing the scale of funding gap, a proportion of existing S106 monies already collected, along with a proportion of those to be collected from those sites with planning permission (or granted planning permission in the interim period), could contribute towards reducing that gap.
- 2.5. Once these completions and outstanding commitments are accounted for, the outstanding housing requirement is reduced to a range of 3,894 dwellings. The precise impact on each growth location is identified in the table below and it is this outstanding housing growth requirement which will be used to inform the recommendations for infrastructure requirements.

Table 2-2: Outstanding Housing Growth Requirements (2010/11-2024/25)

5 Sub Areas	
	Outstanding housing growth
Ely	1,060
Soham	1,143
Littleport	403
Rest of District North	565
Rest of District South	724
Total	3,894
Settlement Hierarchy	
	Outstanding housing growth
Market Towns	2,606
Key Service Centres	
Bottisham	75
Burwell	169
Haddenham	37
Newmarket Fringe	40
Sutton	126
Other Areas	841
Total	3,894

Source: East Cambridgeshire District Council 2011

- 2.6. In relation to the 'Other Areas' it has been possible to group development outside the market towns and growth locations into the following categories:

- **Elsewhere south of the District:** the parishes of Ashley, Brinkley, Burrough Green, Burwell, Chippenham, Dullingham, Fordham, Kennett, Kirtling, Reach, Snailwell, Swaffham Bulbeck, Swaffham Prior and Westley Waterless
- **Elsewhere north of the District:** Coveney, Isleham, Mepal, Little Downham, Littleport, Little Thetford, Soham, Stretham, Wentworth, Wicken, Witcham, Wilburton, and Witchford.
- **Countryside** (including general windfall and affordable rural developments).

The housing projections for these ‘Other Areas’ are set out in Table 2-3.

Table 2-3: Housing Projection for ‘Other Areas’

Other Areas	Outstanding housing growth
Countryside (Affordable)	245
Countryside (Other)	162
Elsewhere (North)	198
Elsewhere (South)	236

Source: East Cambridgeshire District Council 20011

- 2.7. In many cases infrastructure requirements will be triggered when a given number of dwellings or associated population threshold is exceeded. In these cases, accurate forecasting of the housing trajectory is essential for infrastructure projects to be phased appropriately.
- 2.8. There were 5681 completions between 2001 and 2011. Housing growth will peak at 2016/17 when annual completions are expected to reach 801 units across the District. After this point the average annual rate of completions reduces significantly to 120 dwellings in 2023/24 and 2024/25.

3. Housing Mix and Tenure

- 3.1 Infrastructure requirements are generally driven by changes in the local population base and so it is necessary to assess the population change that is likely to be associated with the housing growth set out in the previous chapter.
- 3.2 The general characteristics of a household, including Average Household Size (AHS) and Child Yield, will vary by unit size and tenure, and this section sets out the assumptions that will be used as part of this study. Where possible, the assumptions are aligned with local housing policy.

HOUSING TENURE

- 3.3 There are two affordable housing targets identified in the Core Strategy, reflecting the differing requirement in the north and south of the district. In the north of the district the Core Strategy states that 30% of dwellings on sites with more than three units should be affordable. In the south of the district this figure rises to 40%.
- 3.4 For simplicity, the 30% and 40% thresholds will be applied to all developments, besides 'Development within the Countryside' where separate projections have been used. The precise figures for affordable and private 'Development within the Countryside' are presented in Table 2-3 and equate to an affordable housing threshold of 55%. Across the whole district, the affordable housing requirement is assumed to include 70% social rented properties and 30% intermediate properties.

Table 3-1: Tenure Mix

	Private Housing	Affordable Housing	Total
North of District	70%	30%	100%
South of District	60%	40%	100%
Affordable housing breakdown			
All of District		70% Social Rented 30% Intermediate	100%

Source: East Cambridgeshire Core Strategy 2009

HOUSING SIZE MIX

- 3.5 Table 3-2 sets out the Councils preferred mix of housing sizes on development schemes, for private and affordable housing. The preferred housing size mix was produced by Cambridgeshire County Council Research Group (Cambridgeshire Housing Sub-Region Property Size Guide 2009), taking into account census data and market behaviour. The preferred affordable housing size mix has been determined by the East Cambridgeshire District Council housing Team, and is based on information of the needs of applicants, letting data on the availability of homes of various sizes, and the Councils vision to create sustainable balanced neighbourhoods.

Table 3-2: Housing Size Mix

House Type	1 bed	2 bed	3 bed	4 bed	Total
Private Housing	4%	18%	31%	47%	100%
Affordable housing	10%	45%	35%	10%	100%

4. Population Forecasts

INTRODUCTION

- 4.1. To accurately assess the infrastructure requirements associated with the proposed housing growth, it is necessary to model the likely impacts of the housing growth on the local population. To inform this study, local population growth is modelled on a development specific and district wide basis, where:
- **Development specific population growth** refers to the number of people forecast to reside within new dwellings.
 - **District wide population growth** which models the projected district wide demographic changes after taking account of the housing growth.
- 4.2. The development specific population growth is relevant when assessing the infrastructure requirements resulting from local population change. Examples include community facilities and primary education.
- 4.3. The district wide population growth is relevant when assessing the requirements for infrastructure whose catchment area may extend across an area wider than the proposed developments or growth locations. Examples include secondary education and open space designated to serve the whole district. In these cases it is important to take account of any changes that are expected to occur within the existing population – such as population ageing or declining household size. The figures for district wide population growth have been provided by the Cambridgeshire Research Group (part of Cambridgeshire County Council).

DEVELOPMENT SPECIFIC POPULATION GROWTH: METHODOLOGY

- 4.4. The development specific population change associated with housing growth is based on average household size and average child yield per dwelling, adjusted for tenure and size mix. The following table provides details of the assumptions made in relation to household characteristics, by tenure and dwelling type. All assumptions in this study are made at the district level. Table 4 –1 contains the average dwelling occupancy rates for various sizes of dwellings, and has been used to inform all types of infrastructure requirement calculations. Table 4-2 has used data on the average number of children per dwelling has been used to inform education infrastructure calculations only.

Table 4-1: Dwelling occupancy rate

House Type	1 bed	2 bed	3 bed	4+ bed
All ages				
Private housing	1.3	1.4	2.4	2.9
Affordable housing	1.2	2.3	3.8	5.1

Source: Census 2001 / CORE data

Table 4-2: Child Multipliers

Phase	Age Range	Children/100 dwellings	Mid-point
Early Years	0 – 3	18 – 25	21.5
Primary	4 – 10	25 – 35	30
Secondary	11 – 15	18 – 25	21.5
Post 16	16 – 17	7 – 10	8.5

Source: Cambridgeshire County Council

Development Associated Population Forecasts

- 4.5. Using the assumptions on housing mix, size and tenure described previously it is possible to calculate the development specific population change. As explained in Section 2 only infrastructure requirements associated with housing growth post 2011 are considered as part of this report, therefore completions between 2001 and 2011 are discounted. Outstanding commitments with planning permission at March 2011 will not be chargeable under CIL and are also discounted from the analysis. Table 4-3 below sets out district wide LDF housing growth after completions and outstanding commitments are discounted. It also sets out the population growth associated with that growth.

Table 4-3: Development Specific Population Forecasts 2011-2025

	No. of dwellings	Population increase
Housing growth	3,894	9585

- 4.6. The development specific population change associated with each growth location is presented in Table 4-4 below. This spatial distribution along with the relative phasing of growth over the scenarios will have different implications for infrastructure requirements across the district.

Table 4-4: Population Growth (2011-25), by Growth Location

5 Sub Areas		Settlement Hierarchy	
Ely	1702	Market Towns	5,720
Soham	2965	Key Service Centres	
Littleport	1053	Bottisham	195
Rest of District North	1590	Burwell	437
Rest of District South	2274	Haddenham	94
		Newmarket Fringe	100
		Sutton	327
		Other Areas	2,711
Total	9,585	Total	9,585

DISTRICT WIDE POPULATION GROWTH

- 4.7. The development specific population growth is a useful measure for assessing the local increase in demand for infrastructure that is associated with specific development locations. However, when assessing district wide infrastructure requirements it is also important to take account of changes in the existing population base as:

- Population growth among the existing population (or growth of specific cohorts, such as young or older people) may further increase demand for infrastructure
- A decrease in the existing population base (or particular cohorts) may lead to capacity in existing facilities becoming available and this may be used to meet the projected demand associated with the development specific population growth,

4.8. The Cambridgeshire County Council Research Group is able to provide a range of demographic projections based on a variety of housing scenarios for East Cambridgeshire as a whole. They have provided the following scenarios to inform this study:

- **Baseline Demographic Projections** – population projections for the whole of East Cambridgeshire, assuming zero house building from this point forward. These projections vary from standard demographic projections which would assume a steady rate of housing growth, based on the recent level of completions. This projection provides a baseline level of population growth against which it is possible to assess the population impacts associated with projected housing growth.
- **Scenario Led Population Projections** – a demographic projection which takes account of the housing growth scenario set out in the previous chapter.

4.9. The baseline projections and the projections associated with Core Strategy levels of growth are set out in the table and figures below. Overall the population of East Cambridgeshire is expected to decline by more than 4,900 by 2026¹ in the absence of house building. This can be attributed to a continued decrease in the size of the households within the district, and so a period of zero house building would be associated with increased out-migration from the district as households move elsewhere to find appropriate dwellings.

4.10. However, the level of housing growth under the LDF scenario is sufficient to reverse this trend and District wide population growth is around 10,200 under the LDF scenario.

Table 4-5: District Wide Population Projections – Total Population

	2001	2011	2016	2026	Total Change (2011 to 2026)
No House Building	70,900	81,500	79,400	76,600	-4,900
LDF	70,900	81,500	84,800	91,700	+10,200

Source: Cambridgeshire County Council Research Group, 2011

¹ The Demographic Projections run to 2026, rather than 2025 as the demographic model used by the County Council operates on the bases of five tranches from 2001. This is explained in greater detail in the appendices.

4.11. As the following tables set out, the general pattern of LDF population growth is not uniform across all age cohorts. Overall, the population of East Cambridgeshire is expected to age significantly by 2026. The population aged over 65 is expected to grow far more quickly than that of the general population.

Table 4-6: District Wide Population Projections – Under-18s

	2001	2011	2016	2026	Total Change (2011 to 2026)
No House Building	16,100	17,700	17,000	14,700	-3,000
LDF	16,100	17,700	18,200	18,900	+1,200

Table 4-7: District Wide Population Projections – Over-65s

	2001	2009	2016	2026	Total Change (2011 to 2026)
No House Building	11,500	14,600	17,100	21,300	+6,700
LDF	11,500	14,600	17,400	22,500	+7,900

4.12. These patterns of growth will have particular impacts on the recommendations for social infrastructure. While the population of under-18s is not expected to rise dramatically across the district it will still be necessary to provide additional educational facilities within the market towns, as these areas are expected to see a significant increase in the number of young people associated with the proposed developments.

5. Employment Assumptions

5.1 The population growth associated with the housing trajectory will increase the requirement for jobs. The extent to which these jobs are provided within East Cambridgeshire will affect sub regional commuting patterns and the requirement for transport infrastructure. Concentrations of employment may also increase the requirement for utilities infrastructure.

- LDF Scenario 109.36 Ha of employment land

5.2 It should be noted that in some areas there is a net loss of employment land between 2006 and 2011. Recognition of this is important when identifying the supporting infrastructure requirements. Conversely, when assessing the potential to raise developer contributions on employment land, it is important to understand the amount of new employment land that is projected to come forward.

5.3 The employment land is expected to be split equally between B1, B2, and B8 uses except at:

- Lancaster Way, where the projected employment land is predominantly B2
- Bottisham, where the projected employment land is predominantly B1

Table 5-1: Employment Land Growth

5 Sub Areas		
	Completions (ha)	Projections (ha)
Ely	4.36	43.74
Soham	-3.47	8.57
Littleport	9.88	6.82
Rest of District North	6.2	14.1
Rest of District South	8.29	17.61
Total	25.26	90.84
Settlement Hierarchy		
Market Towns	10.77	59.13
Bottisham	0	1
Burwell	1.59	3.81
Haddenham	3.35	-1.15
Newmarket Fringe	-0.1	4.2
Sutton	1	20.1
Key Service Centres Total	5.84	27.96
Fordham	0.77	6.43
Other LSC's	2.3	-0.6
Other Area	5.58	-2.08
Other Areas Total	8.65	3.75
Total	25.26	90.84

5.4 These employment land projections are built up from:

- Outstanding commitments (as of 31.03.11), excluding development under construction
- Large unallocated sites with capacity of 0.5ha or more
- Currently unused employment allocations - estimated suitable capacity
- Potential new areas for allocation

5.5 The extent to which new jobs are provided within East Cambridgeshire will affect sub regional commuting patterns within Cambridgeshire and the requirement for transport infrastructure. The implications of employment growth on infrastructure has been taken into account when assessing transport and utilities infrastructure required to support future growth.

Section 2: Infrastructure Requirements

6. Education

OVERVIEW

- 6.1 Cambridgeshire County Council has a statutory requirement to provide school places for children living in the area who are of school age and whose parents want their child educated in the state sector. In line with this statutory duty, the County Council needs to ensure that sufficient school places are provided to meet needs arising from new housing developments.
- 6.2 This chapter provides an overview of the existing range of educational facilities in East Cambridgeshire and assesses the additional demand for educational facilities that is likely to arise from the proposed housing developments. These findings are used to inform recommendations on the additional level of educational infrastructure that is necessary to support the changing population, which were developed in partnership with Cambridgeshire County Council.
- 6.3 Given the local nature of provision, the demand for educational facilities is based on the Development Specific Population Growth set out in Chapter 4. District wide demographic projections have informed the recommendations, particularly in terms of anticipating potential levels of capacity in areas where growth is insufficient to trigger a new facility. It should be noted that final recommendations in relation to Primary School and Secondary School facilities will be informed by more detailed analysis carried out by Cambridgeshire County Council in partnership with ECDC.

POLICY CONTEXT

- 6.4 Policy CS7 of the East Cambridgeshire Core Strategy identifies a requirement for the provision of two new primary schools in Ely, a new primary school in Soham, a new primary school in Littleport, a new secondary school in either Ely or Littleport, and other enhancements to education provision across the district, to support growth over the period up to 2026.
- 6.5 The County Council have undertaken a review and public consultation on secondary school provision across East Cambridgeshire. The review highlighted the need for a 5-6 FE Secondary School in Littleport and the expansion of existing provision to provide a total of 7-10 FE across the District.
- 6.6 The Education Planning in Cambridgeshire: School Organisation Plan Outlook for 2006-2011 document operates under 11 core principles which focus on safety, access, inclusion and the important role of family and community. The plan also discusses the importance of extended schools provision, a diverse provision of denominational schools, and the development of Children's Centres. Key principles include:

- where possible, no child of primary school age to have to travel more than two miles (the statutory walking distance) to get to school
- where possible, no child of secondary school age to have to travel more than three miles (the statutory walking distance) to get to school
- where considered to be the appropriate pattern of provision by other providers, leisure and community education/lifelong learning can be co-located with secondary schools

6.7 Following publication of the School Organisation Plan, Cambridgeshire County Council have indicated that they will now allow primary schools that are up to three Forms of Entry (FE) or 630 places should this suit the context of the individual development. One Form of Entry equates to 30 pupils per class with one class per year.

EARLY YEARS FACILITIES

Existing Provision

6.8 Cambridgeshire County Council defines early years' provision as nurseries, pre-school playgroups and childminding. There are over 150 private childminders who provide childcare, ranging from 2 to 6 places each. Childcare provided through private childminders, however does not form part for this study as delivery would occur through independent providers on private premises. Early years settings have therefore been defined as nurseries and pre-school playgroups for children aged up to five years. Most early years' settings are clustered around the market towns and key service centres, however there is some provision within rural areas.

Early Years Population Change

6.9 The assessment of early years facilities is based on development specific population growth projections, which can be used to measure the need associated with the new dwellings and does not consider long-term trends in the existing population. Table 6-1 below provides details of the total early years population that would be directly associated with the new dwellings that are projected to come forward within each location.

Table 6-1: Development Specific Early Years Population

5 Sub Areas		
	Early Years Population (Cumulative)	
	2016	2025
Ely	43	228
Soham	69	246
Littleport	18	87
Rest of District North	43	121
Rest of District South	36	156
Total	209	837
Settlement Hierarchy		
Market Towns	130	560
Bottisham	2	16
Burwell	4	36
Haddenham	1	8
Newmarket Fringe	5	9
Sutton	9	27

Countryside: Affordable	33	53
Countryside: Other	6	35
Elsewhere (North)	12	43
Elsewhere (South)	6	51
Total	209	837

Infrastructure Requirements

6.10 In assessing the appropriate level of childcare provision, Cambridgeshire County Council discount the early years population as not all children aged 0-4 require early years services. To ensure consistency with the County Council approach, it is assumed that 45.01% of the early years population identified above require early years services. It is also assumed that of this total requirement for places, 31.76% will be for nursery provision, 50.86% for pre-school provision and 17.38% will be for childminders. This is in line with the approach adopted by Cambridgeshire County Council (see table 6-3).

6.11 Pre-school provision is required for all 3-4 year olds on a part time basis (15 hours per week) and the requirement for pre-school provision set out below is equivalent to all 3-4 year olds using pre-school places on a part time basis

Table 6-2: Cumulative demand for Early Years Places

5 Sub Areas		
	Early Years Places (Cumulative)	
	2016	2025
Ely	19	103
Soham	31	111
Littleport	8	39
Rest of District North	19	55
Rest of District South	16	70
Total	94	377
Settlement Hierarchy		
Market Towns	58	252
Bottisham	1	7
Burwell	2	16
Haddenham	1	4
Newmarket Fringe	2	4
Sutton	4	12
Countryside: Affordable	15	24
Countryside: Other	3	16
Elsewhere (North)	6	19
Elsewhere (South)	3	23
Total	94	377

Table 6-3 Childcare Type

	Day Nursery (Full day care)	Pre-school (inc Maintained Nursery Places)	Childminder
East Cambridgeshire	31.76%	50.86%	17.38%

Source: Cambridgeshire County Council

6.12 Cambridgeshire County Council does not have a standard size for day nurseries and pre-school facilities, however they advise that 16 place (or less)

day nurseries or pre-schools may prove difficult to sustain. Each pre-school facility usually provides 26 places.

Pre-School

- 6.13 Table 6-4 sets out the number of pre-school places associated with the Development Specific Early Years Population. The figures are based on the County Council's standards and assume that 45.01% of 0-4 year olds will require childcare provision and of these, 50.86% will require pre-school places.
- 6.14 While the demand for a new facility is met by growth occurring in the north of the district and in the south of the district, this requirement will be spread over a broad area and it is unlikely that a single facility would meet the required demand. Furthermore, in light of the district wide demographic projections presented in Chapter 4, it can be expected that capacity will arise in existing facilities across the district and these may be used to accommodate the additional demand associated with housing growth that is not met by the facilities described above.

Table 6-4 Cumulative Demand for Pre-School Places

5 Sub Areas		
	Pre School Places (Cumulative)	
	2016	2025
Ely	10	52
Soham	16	56
Littleport	4	20
Rest of District North	10	28
Rest of District South	8	36
Total	48	192
Settlement Hierarchy		
Market Towns	30	128
Bottisham	0	4
Burwell	1	8
Haddenham	0	2
Newmarket Fringe	1	2
Sutton	2	6
Countryside: Affordable	8	12
Countryside: Other	1	8
Elsewhere (North)	3	10
Elsewhere (South)	1	12
Total	48	192

- 6.15 Given the County Council policy that pre-school facilities provide 26 places, the pre-school places set out in the table above corresponds to the following recommendations for new facilities:

Table 6-5: Pre-School Facilities Recommendations

Ely	2 x pre-school Facilities
Soham	2 x pre-school Facilities
Littleport	1 x pre-school Facilities

Nursery Places

- 6.16 Table 6-6 sets out the demand for nursery places associated with the Development Specific Early Years Population. The requirements are based on the County Council's standards and assume that 45.01% of 0-4 year olds will require childcare provision, and of these 31.76% will require nursery places.

Table 6-6 Cumulative Demand for Nursery Places

5 Sub Areas		
	Pre School Places (Cumulative)	
	2016	2025
Ely	6	33
Soham	10	35
Littleport	3	12
Rest of District North	6	17
Rest of District South	5	22
Total	30	120
Settlement Hierarchy		
Market Towns	19	80
Bottisham	0	2
Burwell	1	5
Haddenham	0	1
Newmarket Fringe	1	1
Sutton	1	4
Countryside: Affordable	5	8
Countryside: Other	1	5
Elsewhere (North)	2	6
Elsewhere (South)	1	7
Total	30	120

- 6.17 In the absence of a preference from the County Council the standard provision of 50 place nurseries has been assumed, which translates into the following recommended nurseries:

Table 6-7: Nursery Facilities Recommendations

Ely	1 x 50 place nursery
Soham	1 x 50 place nursery

- 6.18 The demand outside of Ely and Soham is sufficient to trigger the requirement for a new facility, but will be spread over a wide area and a single facility is unlikely to meet the required demand. It is anticipated that this demand could be met through a combination of some of the surplus places that are associated with the new facilities within the market towns, and the capacity arising from the decline in the early years population across the whole of the district. These are not intended to be final recommendations as the re-organisation or building of new facilities would be managed by Cambridgeshire County Council.
- 6.19 It should be noted that the recommendations in Tables 6-5 and 6-7 are for new facilities and there may be requirements for extensions to existing

facilities in the smaller settlements in accordance with the figures identified in Tables 6-4 and 6-6.

PRIMARY EDUCATION

Existing Provision

- 6.20 There are a total of 26 primary schools located within East Cambridgeshire. A further 4 schools are located outside of the district but provide places for children within East Cambridgeshire. There is a good spread of primary schools across urban and rural areas within East Cambridgeshire.
- 6.21 Across the whole district a total of 577 surplus places are available, 5.7% of total primary school capacity. This is predicted to fall to 277 over the next five years, 2.7% of total primary school capacity (Cambridgeshire County Council 2011). In general, this spare capacity (277 places) is not located in areas of growth. Given that the Department of Education recommends that 10% of educational capacity be held back to provide flexibility in managing the delivery of education and parental preference, existing capacity will not be discounted from the primary education requirements identified below.

Primary School Aged Population Change

- 6.21 The pattern of primary school aged population change will not occur uniformly across the whole district. In particular, it can be assumed that the primary aged population will increase in areas associated with significant housing growth and decline in other areas.
- 6.22 Under the policy context, the preference for primary education to be provided within two miles of a child's dwelling suggests that there will be limited scope to utilise capacity arising in parts of the district to meet increasing demands elsewhere. Consequently, the assessment of primary school requirements is based on the development specific population growth, which can be used to measure the need associated with the new dwellings and does not consider the long term trends in the existing population.

Primary School Assumptions

- 6.23 Cambridgeshire County Council has a preferred maximum size for primary schools of two forms of entry (2FE), which corresponds to 420 places. A primary school form of entry is equivalent to one class of 30 pupils in each school year and provides a total of 210 places.

Infrastructure Requirements

- 6.24 The Core Strategy, together with detailed analysis which Cambridgeshire County Council has undertaken in partnership with East Cambridgeshire District Council over the past few years, has identified the need for the provision of two new 2 FE primary schools in Ely, a new 1 or 2 FE primary school in Soham and, a new 1FE primary school in Littleport. These recommendations were included in the Site Allocations Options Paper (ECDC, July 2010) and Ely Area Action Plan Options Paper (ECDC, July 2010). However it needs to be noted that these infrastructure

recommendations are related to the total Core Strategy growth scenario, including housing completions since 2009 and outstanding commitments.

- 6.25 It has already been outlined, in Chapter 2, that it is assumed, for the purposes of this study, that all sites with planning permission will not pay the CIL charge and that in assessing the scale of the infrastructure funding gap, a proportion of existing S106 monies already collected, along with a proportion of those to be collected from those sites with planning permission (or granted planning permission in the interim period), could contribute towards reducing that gap.
- 6.26 Once completions and outstanding commitments are accounted for, the outstanding housing requirement is reduced to a range of 3,894 dwellings. Table 6-8 outlines the cumulative demand for primary school places associated with that outstanding housing requirement.

Table 6-8 Cumulative demand for Primary school places

5 Sub Areas		
	Primary School Places (Cumulative)	
	2016	2025
Ely	60	318
Soham	97	343
Littleport	25	121
Rest of District North	60	169
Rest of District South	50	217
Total	291	1168

- 6.27 Table 6-9 gives a breakdown of the scale of primary school infrastructure likely to be required as a result of outstanding housing growth. Given that existing capacity in primary schools across the District will fall to 2.7% over the next five years it will be necessary to expand facilities outside of the market towns and so the cost of providing primary school places in the north and south of the District has been included in the overall assessment of education infrastructure costs.

Table 6-9: Primary School infrastructure requirements associated with outstanding housing growth

	Infrastructure requirements
Ely	318 places (approx 1.5 FE Primary School)
Soham	343 places (approx 1.5 FE Primary School)
Littleport	121 primary school places
Rest of District North	169 primary school places
Rest of District South	217 primary school places

- 6.28 It is important to recognise that the requirement for primary school provision and the facility recommendations presented in this chapter will form part of a wider programme of reorganising the delivery of primary education across the district.

SECONDARY SCHOOLS

Existing Provision

- 6.29 There are four secondary schools located within East Cambridgeshire, each with a defined catchment area. Each secondary school also has surplus capacity ranging from 7 to 161 places and totalling 302 across the whole district or 6.1% of all places.

Secondary School Assumptions

- 6.30 Cambridgeshire County Council sets out its preferred minimum and maximum size for secondary schools based on secondary school forms of entry. Each form of entry represents a single class of 30 pupils in each year of secondary school and equates to 150 places. Cambridgeshire County Council sets out that no secondary school should be smaller than 4FE (or 600 places) or larger than 11FE (or 1,650 places). The minimum size is to ensure that the school is able to offer a choice of subjects for its pupils.

Infrastructure Requirements

- 6.31 Cambridgeshire County Council has a policy of providing secondary school places within three miles of a child's residence where possible.
- 6.32 The County Council has undertaken a review and public consultation on secondary school provision across East Cambridgeshire, during which time presentations were given to the East Cambridgeshire External Partnerships Group and Local Strategic Partnership. Numerous local and county Council Members also attended various consultation evenings. The review highlighted the need for a 5-6 FE Secondary School in Littleport and the expansion of existing provision to provide a total of 7-10 FE across the District.
- 6.33 The requirements identified provide an indication of how the educational system in East Cambridgeshire could be organised to adequately meet the demands associated with the proposed levels of growth. They are not intended to be final recommendations. Any reorganisation of existing provision would be managed by Cambridgeshire County Council after consultation with the affected schools and communities.
- 6.34 However, these recommendations are based on adopted Core Strategy levels of growth including completions since 2009 and outstanding commitments. Furthermore, it has already been outlined in Chapter 2 that it is assumed, for the purposes of this study, that all sites with planning permission will not pay the CIL charge and that in assessing the scale of the infrastructure funding gap, a proportion of existing S106 monies already collected, along with a proportion of those to be collected from those sites with planning permission (or granted planning permission in the interim period), could contribute towards reducing that gap.
- 6.35 Once completions and outstanding commitments are accounted for, the outstanding housing requirement is reduced to a range of 3,894 dwellings. Table 6-10 outlines the cumulative demand for secondary school places associated with that outstanding housing requirement.

Table 6 – 10 Cumulative demand for secondary school places

5 Sub Areas		
	Secondary School Places (Cumulative)	
	2016	2025
Ely	43	228
Soham	69	246
Littleport	18	87
Rest of District North	43	121
Rest of District South	36	156
Total	209	837

6.36 An outstanding housing growth requirement for 3,894 dwellings creates a requirement for 315 places or 2FE (to be provided as part of a 5FE secondary school in Littleport) in Ely and Littleport, 246 places at Soham and 277 places for district-wide expansion of existing provision.

6.37 It is important to recognise that the requirement for secondary school provision and the facility recommendations presented in this chapter will form part of a wider programme of reorganising the delivery of secondary education across the district.

Post 16 Education

6.38 Post 16 Education is changing and there will soon be a requirement for participation up to the age of 18. However, such compulsory education can be delivered in a number of ways, including through the sixth form A-Level route, at College or on a vocational basis. Some courses will be based within schools and colleges or similar facilities on a full-time basis, where as others may be through a day release scheme or through work-based learning.

6.39 Furthermore, as the choice of where post 16 education is taken up is down to individuals, catchment areas for education no longer apply. Consequently, it will be difficult to predict in any precise way the requirements for 16-18 education, however it is possible to assess the potential impact of housing growth on the number of 16-18 year olds and assess whether this is likely to generate a requirements for additional facilities.

6.40 The following table presents the requirements directly associated with housing growth (i.e. the development specific 16-18 population). While there is insufficient demand at the district level to trigger a new facility, there may be a concentration of demand within a particular growth location that does. The greatest demand is within the market towns but given that this provision is likely to be met through a variety of full and part-time training courses, it is unlikely to trigger a new facility.

6.40 Looking at the overall shift to compulsory education for under-18s, the Learning and Skills Council Strategic Review (2008) envisaged that new provision would be made in the new town of Northstowe and an expansion of some existing institutions in Cambridge City. Additional post-16 provision was not proposed in East Cambridgeshire as part of the LSC review.

Table 6-11 Cumulative Post 16 Places

5 Sub Areas		
	Post 16 Places (Cumulative)	
	2016	2025
Ely	17	90
Soham	27	97
Littleport	7	34
Rest of District North	17	48
Rest of District South	14	61
Total	82	331

EDUCATION INFRASTRUCTURE OVERVIEW AND COSTS

Education Requirements

- 6.41 The tables on the following pages provide more detail on the location and costs of the projects identified above. The assumptions set out in this chapter represent an early stage in the process of assessing education requirements and should be considered only as a preliminary response in respect of the strategic growth scenario. The modelling only forecasts the scale of demand for education provision and it will be down to Cambridgeshire County Council to build on this work to identify the appropriate delivery solutions.

Table 6-12 Overview of Education Requirements

Early Years	5 x 26 place pre-school facilities 2 x 50 place nurseries
Primary Schools	2 x 1.5 FE primary schools 507 place expansion of existing provision
Secondary Schools	315 places or 2FE as part of a 5FE school to be provided in Littleport 246 place expansion of existing provision at Soham 277 place district-wide expansion of existing provision

Source: ECDC/ Cambridgeshire County Council, 2010

Education Infrastructure Costs and Funding

- 6.42 Cambridgeshire County Council has identified that in recent years the most significant source of funding for new schools or expanding existing schools has been housing developers or S106 contributions.

Table 6-13: Education Infrastructure Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Education	26-place Pre-School Facility	Ely	£270,800	£0	
Education	26-place Pre-School Facility	Ely	£270,800	£0	
Education	26-place Pre-School Facility	Soham	£270,800	£0	
Education	26-place Pre-School Facility	Soham	£270,800	£0	
Education	26-place Pre-School Facility	Littleport	£270,800	£0	
Education	50 Place Nursery	Ely	£500,000	£0	
Education	50 Place Nursery	Soham	£500,000	£0	
Education	1.5 FE Primary School	Ely	£5,475,000	£5,475,000*	S.106
Education	1.5 FE Primary School	Soham	£5,475,000	£0	
Education	121 Primary School places	Littleport	£2,103,101	£0	
Education	169 Primary School places	Rest of District North	£2,937,389	£0	
Education	217 Primary School places	Rest of District South	£3,771,677	£0	
Education	315 places or 2FE as part of a 5FE school	Littleport	£9,113,895	£0	
Education	246 secondary school places	Soham	£7,117,518		
Education	277 secondary school places	North and south of District	£8,014,441	£0	
Total Assumed Infrastructure Costs					£46,362,021
Total Assumed Funding					£5,475,000
Total Assumed Funding Gap					£40,887,021

*The CIL system will result in the scaling back of S.106 agreements but will not replace them entirely. Section 106 agreements (and Section 278 Highways agreements and planning conditions) will still be used by the District Council to secure Development Specific Infrastructure on large sites. Large sites often necessitate the provision of their own development-specific infrastructure, such as primary schools, which are dealt with more suitably through a Section 106 agreement. The District Council wish to see a primary school delivered on-site in north Ely through Section 106 and this has been taken into account in the overall assessment of infrastructure costs.

7. Healthcare

POLICY CONTEXT

- 7.1 Health and Social Care incorporates a broad range of social infrastructure, including GP surgeries, healthcare centres, dentists, pharmacies, optometrists, community and acute hospitals, childrens centres, care and extra homes and day care centres.
- 7.2 It is the responsibility of local authorities to ensure that adequate land is safeguarded for the provision of health and social care with the local healthcare authorities and Primary Care Trusts (PCTs) being responsible for bringing these sites into active use. Under the Health and Social Care Bill currently progressing through Parliament, PCT's will be abolished from April 2013 and the current commissioning responsibilities will pass to clinical commissioning groups and the new NHS Commissioning Board. Public Health will transfer to Local Authorities and Public Health England. New 'Health and Well Being Boards' will oversee the local health agenda.

EXISTING PROVISION

Overview of Provision

- 7.3 East Cambridgeshire has a relatively strong coverage of GPs and Dentists, with all of the market towns and key service centres providing some level of provision. Neither Sutton or Haddenham in the north west of the district contain dentist surgeries, however both are located relatively close to Ely, which has the greatest level of dental provision within the district.
- 7.4 In addition to GP and dentist surgeries each of the market towns contains a health centre or community hospital. These are:
- **Princess of Wales Hospital** (Ely), which includes a Minor Treatments Centre, and a range of specialist out-patient services, in addition to an inpatient rehabilitation service.
 - Littleport Health Centre
 - **Soham Health Centre** which accommodates staff providing services to the wider East Cambridgeshire area.

Potential for Expansion

- 7.4 Focussing on the delivery of community based healthcare services within the market towns; NHS Cambridgeshire has highlighted the following key points.
- 7.5 Ely: The area is served by the Princess of Wales Hospital, also housing The Cathedral Practice, on the northern edge of Ely and the St Mary's Practice, located close to the town centre. The PCT have identified that the primary care facilities at the Princess of Wales Hospital are not of a high enough quality or of sufficient capacity. The site is strategically located in relation to the proposed future growth in north Ely and has potential for redevelopment.

Cambridgeshire PCT have confirmed that to meet future needs it will be necessary to provide additional facilities on the same site.

- 7.6 Provision at St. Mary's Practice is of a higher quality however it is currently operating at full capacity, with limited scope for expansion.
- 7.7 Soham: Served by relatively new premises with potential for expansion, however additional land would be required before this could be undertaken. Soham is also served by a separate Health Centre which is not owned by the PCT. Cambridgeshire PCT have stated that this facility has limited potential for refurbishment.
- 7.8 Littleport: Served by relatively new premises that offer scope for expansion (including the provision of a small operating centre). The first phase of expansion is planned for 2012/13.

INFRASTRUCTURE DEMAND

Healthcare Approach

Healthcare Standards: Primary Care

- 7.9 The demand for healthcare facilities will vary according to a range of local factors, including the age and overall health of the local population and accessibility issues in more rural areas. However, it is possible to use nationally recognised standards to estimate the potential demand for healthcare facilities associated with a given level of housing growth. These standards are based on the total population growth and would reflect the mix of housing by size and tenure.

Table 7-1: Primary Care Infrastructure Demand Assumptions

Facility Type	Standards
GPs	1 GP per 1,800 people
Dentist	1 Dentist per 2,000 people

Source: National Health Service (GPs); Traffic light maps of Dentists distribution in England and Wales, 2004

- 7.10 These standards will be applied to the Development Specific Population Growth to forecast the demand for primary care facilities, as it is assumed that the provision of such services should be based on local and not district wide need.

Healthcare Standards: Acute Care

- 7.11 Cambridgeshire PCT has stated that demand for acute care should be assessed at the County level, building on the findings of the Draft Strategic Plan (2010-15). This broadly sets out that Cambridgeshire PCT is not seeking an increase in bed numbers, but seeks to create more capacity by shifting more care into community settings and building on advancements in medicine and technology to reduce hospital based activity. It indicates that community based care could include nursing, therapies and social care.

Primary Care - Primary Care Demand

- 7.12 The cumulative demand for GPs and dentists, based on the assumptions identified above and the housing trajectory set out in Chapter 2 is presented in the tables below. Over the whole of East Cambridgeshire, the level of growth associated with the LDF scenario generates demand for 5 additional GPs and 5 additional dentists. Demand is concentrated within the market towns, with the growth in demand elsewhere being insufficient for an additional GP in any single growth location.

Table 7-2: Cumulative GP Requirements

5 Sub Areas		
	2016	2025
Ely	0.2	0.9
Soham	0.5	1.6
Littleport	0.1	0.6
Rest of District North	0.3	0.9
Rest of District South	0.3	1.3
Total	1.4	5.3

Table 7-3: Cumulative Dentist Requirements

5 Sub Areas		
	2016	2025
Ely	0.2	0.9
Soham	0.4	1.5
Littleport	0.1	0.5
Rest of District North	0.3	0.8
Rest of District South	0.3	1.1
Total	1.2	4.8

Primary Care Facilities Requirements

- 7.13 The following table sets out the investments in primary care facilities that would be necessary to meet the requirements associated with the housing growth. These are based on indicative-only recommendations from Cambridgeshire PCT concerning the most appropriate way of meeting increased demand within the market towns.

Table 7-4: Primary Care Facilities requirements*

Ely	Provision of 6 GP facility on site of Princess of Wales Hospital Expanded dental provision in town (1 dentists)
Soham	Expand Staploe Medical Centre (2 GP's) Expand dental provision in town (2 dentists)
Littleport	Expand St Georges Medical Centre (1 GP) Expanded dental provision in town (1 dentists)

* (Please note that while the Cambridgeshire PCT have identified that there will be a requirement for 9 GP's, only the demand for 5 of these GP's is created by outstanding growth as is outlined in Table 7 – 2.)

- 7.14 Within Ely, the requirements associated with the LDF level of growth could be met through re-providing the Primary Care facilities at Princess of Wales Hospital. This site is currently at capacity and would need to be re-provided at a larger scale in order to provide capacity for existing and future residents.

This would ideally occur on the hospital, site subject to feasibility, as the majority of planned growth will occur to the north of the hospital site. The PCT is currently considering the potential for redevelopment at the Princess of Wales site and therefore this new facility should be incorporated within any new design. The full costs for redevelopment of the hospital is included in Table 7.6 as this is deemed related to the proposed level of housing growth.

- 7.15 The St Mary’s Surgery, is an alternative site located close to the town centre, however it is also at capacity. With much of the growth in Ely in recent years being to the west of the town, it is important that capacity is maintained and expanded in the town centre area in order to provide reasonable access to residents in all parts of the town. Options to expand the existing Surgery in its current location have been explored but none of these are feasible. It may be necessary to relocate Primary Care facilities to another site in or close to the town centre. St Mary’s Surgery are in the process of obtaining additional use of a consulting room in the new Sainsburys store, which will create additional clinical capacity separate from the main surgery building.
- 7.16 In Soham the current Staploe Medical Centre could be expanded, subject to land availability to meet the requirements associated with the LDF. The PCT indicate that it may be necessary to re-provide this facility, subject to future discussions with the County Council and Staploe Medical Centre, in which case the old Health Centre site has the potential for redevelopment.
- 7.17 Within Littleport the current Medical Centre was built with room for expansion of the existing building and the amount of growth planned under the LDF would not warrant an additional facility. However, it would require an extension and some reconfiguration to the existing building.
- 7.18 Elsewhere in the district there will be varying levels of impact on other services and facilities and the PCT recognise that some increase in workforce and physical capacity may be required, particularly in Burwell where an extension to the GP facility may be required in the longer term.

Acute Care

- 7.19 Cambridgeshire PCT has confirmed that it is not possible at this stage to determine the precise investments that would be required to serve the new communities that would develop within the market towns and key service centres. However, the need to provide such community based care should be considered as part of the design of community spaces and health facilities recommended elsewhere in this report.

HEALTHCARE INFRASTRUCTURE OVERVIEW AND COSTS

Table 7-5 Overview of Healthcare Requirements

Primary Care	Provision of 6GP facility on site of Prince of Wales Hospital Expanded Staploe Medical Centre (2 GPs) Expanded Littleport Health Centre (1 GP) Expanded Dental Provision (4 dentists across 3 facilities)
Acute Care	Redevelopment of Princess of Wales Hospital

7.20 The assumptions set out in this chapter represent an early stage in the process of assessing healthcare requirements and should be considered only as a preliminary response in respect of the strategic growth scenario. As more detailed delivery models concerning community based care are developed the facility recommendations may change accordingly.

Healthcare Costs

7.21 The total cost of providing the necessary healthcare facilities is outlined in Table 7-6.

Table 7-6: Healthcare Infrastructure Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Healthcare	Provision of 3GP (with room for future expansion to 6) facility on site of Prince of Wales Hospital	Ely	£3,150,000	£0	
Healthcare	Expansion of Existing Dentists (1 dentists)	Ely	£150,000	£0	
Healthcare	Refurbishment of Soham Health Centre (2 GPs)	Soham	£850,000	£0	
Healthcare	Expansion of Existing Dentists (2 dentists)	Soham	£300,000	£0	
Healthcare	Refurbishment of Littleport Health Centre (1 GPs)	Littleport	£2,450,000	£0	
Healthcare	Expansion of Existing Dentists (1 dentists)	Littleport	£150,000	£0	
Total Assumed Infrastructure Costs			£7,050,000		
Total Assumed Funding			£0		
Total Assumed Funding Gap			£7,050,000		

* (Please note that while the Cambridgeshire PCT have identified that there will be a requirement for 9 GP's, only the demand for 5 of these GP's is created by outstanding growth as is outlined in Table 7 – 2. The Dentist recommendations are aligned with what the PCT recommended)

8. Emergency Services

POLICY CONTEXT

- 8.1 The need to ensure that housing development promotes community cohesion and creates safe neighbourhoods and environments is a central consideration of a broad range of strategies and policies including:
- The **Sustainable Community Strategy for Cambridgeshire 2007-2021** is 'safer and stronger communities'. It highlights that key challenges for East Cambridgeshire are domestic violence, alcohol misuse and anti social behaviour;
 - The **Cambridgeshire Local Policing Plan for 2009– 2012**, which sets out the strategic vision for Cambridgeshire Police;
 - The **East Cambridgeshire Sustainable Community Strategy 2008** highlights the key areas of concern are: Anti social behaviour associated with alcohol misuse; Vehicle and burglary crime; Re-offending; and, Domestic violence;
 - The **Cambridgeshire and Peterborough Fire Service Annual Report 2008-09**, which sets out the Authority's vision as for the Service to be a key contributor to community safety; and,
 - The **East of England Ambulance Service NHS Trust**. EEAST's vision is to be the recognised leader in out of hospital emergency and urgent care. The focus is on responding to the demands of incidents, therefore the traditional model of a certain number of ambulances in a town station is not how the system is used today. Instead, vehicles and staff are sent out in response to predicted incident locations. The system is based on a quality-assured vehicles and preparation programme, designed to minimise cross infection and maximise patient safety.

EXISTING PROVISION

Overview

Police

- 8.2 There is one police station in East Cambridgeshire which is located in the main market town; Ely. There are currently 59 Police Officers and 44 Police Support Staff.

Fire Service

- 8.3 There are six fire stations in East Cambridgeshire. These are distributed throughout the three market towns, a number of key service centres and in smaller settlements. The provision of the Fire Service is based on levels of risk. East Cambridgeshire is considered a low risk area.

Ambulance Service

- 8.4 There is one Ambulance Station in East Cambridgeshire which is located in Ely as well as strategic placed vehicles. As with fire service, response times are critical. The strategic location of ambulances means that they are able to answer emergency calls within a specified period.

EMERGENCY SERVICES INFRASTRUCTURE REQUIREMENTS

Police

- 8.5 The police requirements are based on discussions with Cambridgeshire Police and provide an indication of the likely infrastructure requirements associated with LDF housing growth. Cambridgeshire Police aim to maintain policing services at the current ratio of police per population. Assumptions on the level of police services that should be applied to the growth scenarios are set out in Table 8.1 below.

Table 8-1: Police Service Assumptions

	Standard
Police officers	1 police officer per 564 households
Police Support Staff	1 Police Support Staff per 757 households
Custody Accommodation	1 sq m per 370 households

Source: Cambridgeshire Police 2009

- 8.6 Using the assumption identified in Table 8-1 it is possible to estimate the additional demand for police officers, support staff and custody areas associated with the housing growth.

Table 8-2: Demand for Additional Officers in the Police Service

	2016	2025
Ely	0.4	1.9
Soham	0.6	2.0
Littleport	0.1	0.7
Rest of District North	0.4	1.0
Rest of District South	0.3	1.3
Total	1.7	6.9

Table 8-3: Demand for Additional Police Support Staff

	2016	2025
Ely	0.3	1.4
Soham	0.4	1.5
Littleport	0.1	0.5
Rest of District North	0.3	0.7
Rest of District South	0.2	1.0
Total	1.3	5.1

Table 8-4: Demand for custody accommodation

	2016	2025
Ely	0.5	2.9
Soham	0.9	3.1
Littleport	0.2	1.1
Rest of District North	0.5	1.5
Rest of District South	0.5	2.0
Total	2.6	10.5

- 8.7 Discussions with Cambridgeshire Police confirm that it is more appropriate to describe infrastructure requirements at the district level rather than at settlement level. District wide there is demand for 7 police officers, 5 support

staff and 11 sqm of custody space. The custody space and support staff can be accommodated by expanding existing space in the Police Station in Ely. Police officers could be located throughout the district in small neighbourhood teams either with dedicated space or co-located within other facilities such as retail premises.

Fire and Ambulance

- 8.8 In the case of the ambulance services, the level of proposed development is unlikely to require additional infrastructure, as individual ambulances are not permanently stationed in stations or depots. They may be located at strategic sites across the district to ensure that the appropriate response times are met.
- 8.9 In the case of the fire service, based on discussions with Cambridgeshire and Peterborough Fire Service it is envisaged that current provision at Ely, Soham and Littleport would not necessitate a change in fire cover.

EMERGENCY SERVICES OVERVIEW AND COSTS

- 8.10 Table 8-5 sets out an overview of the emergency services. The police service is the only emergency service that requires new facilities. The additional policing requirement includes additional custody space and space for additional support staff within the existing Ely police station, plus space for additional officers located at appropriate locations across the district.

Table 8-5 Overview of Emergency Service Requirements

Police	11sq m of custody space and 5 support staff 7 additional officers across district (low capital costs)
Fire Service	No capital requirements anticipated
Ambulance	No capital requirements anticipated

- 8.11 The assumptions set out in this chapter represent an early stage in the process of assessing emergency service requirements and should be considered only as a preliminary response in respect of the strategic growth scenarios.

Emergency Services Costs

- 8.12 All anticipated emergency services costs are associated with the expansion of local policing across the district.

Table 8-6: Emergency Services Infrastructure Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Emergency Services	11sq m of custody space and 5 support staff	East Cambridgeshire	£160,000	£0	
Emergency Services	7 additional officers across district (low capital costs)	East Cambridgeshire	£70,000	£0	
Total Assumed Infrastructure Costs			£230,000		
Total Assumed Funding			£0		
Total Assumed Funding Gap			£230,000		

9. Community Facilities

POLICY CONTEXT

- 9.1 A key objective of **East Cambridgeshire’s Sustainable Community Strategy** is to provide sustainable, quality community facilities. The strategy recognises the importance of community and cultural infrastructure in the development of sustainable communities.
- 9.2 Community facilities can include a wide range of facilities and spaces which the public can use including libraries, village halls, community centres, provision of children’s pre-school services, venues for community and adult learning, performance and creative spaces, etc. For the purposes of forecasting potential infrastructure requirements, this study is examining the demand for Libraries, Community Centres, Arts Venues and Museums as these spaces provide for a variety of public needs.
- 9.3 At the county level, there is a **Service Level Policy** which specifies the type and standards of service to be provided from groups of similar libraries across the County. These range from the smallest village / community libraries at Level One, through to the wide-ranging and specialist services at Cambridge Central Library - Level 4. The service level of a library is formulated on the basis of:
- the catchment population it serves
 - the number of items (books, videos, etc) it issues
 - the number of visitors it receives
- 9.4 Culture in terms of art and museums are also important elements of sustainable communities. Art activities create opportunities for community interaction and build a sense of place. They can inspire learning, support skills, and personal development as well as promote health and mental wellbeing.

EXISTING PROVISION

Overview

- 9.5 There are 24 community centres and village halls in East Cambridgeshire. These are relatively evenly distributed across the district throughout all the settlements.
- 9.6 There are 4 library service points and 3 library access points located within the 3 market towns, key service centres and smaller settlements.
- 9.7 Ely contains the majority of existing cultural facilities, including the Babylon Gallery, 2 private galleries, The Maltings (which is a 260 seat conference centre and hall and is used as a part time cinema), 3 museums (Ely Museum, Oliver Cromwell House and The Stained Glass Museum) and Library.

- 9.8 There are discussions around redeveloping the Pavilion in Soham to provide a new village hall which will potentially accommodate space for performance arts. In the smaller communities, there is a Country-Life Museum in Burwell, a commercial gallery in Haddenham, Stretham Pumping Station and a Steam Museum in Prickwillow.

COMMUNITY FACILITIES INFRASTRUCTURE REQUIREMENTS

- 9.9 The following table provides an overview of the community facilities standards adopted within this study.

Table 9-1: Community Facilities Assumptions

Type of community facility	Amount per 1000 population (m2)	Amount per person (m2)	Source
Community meeting facilities	111m2 per 1000 population	0.1m2 per person	South Cambs District Council
Arts facilities	45m2 per 1000 population	0.045m2 per person	Arts Council England and Museum, Libraries and Archives Council
Libraries	30m2 per 1000 population	0.03m2 per person	Cambridgeshire County Council
Museums	30m2 per 1000 population	0.03m2 per person	Museum, Libraries and Archives Council

- 9.10 Community facilities should be provided where possible within and alongside communities and for this reason the recommendations for community facilities are based on the development specific population growth projections set out in Chapter 4. The total population change by each growth location is presented in the following table.

Table 9-2: Development Specific Population Growth Projections 2011 - 2025

Ely	1,702
Soham	2,965
Littleport	1,053
Rest of District North	1,590
Rest of District South	2,274
Total	9,585

- 9.11 Outside of the identified growth locations, the demand for community facilities is likely decrease as district wide demographic projections forecast a declining population across the district in the absence of housing growth.

Community Space

- 9.12 Each of the five Sub-areas require additional community facilities. Feedback from local parish councils has identified that in some areas, such as Witcham, there is a need to improve local Village Hall facilities. The distribution of windfall developments and growth outside of the market towns and key service centres should be closely monitored as it is possible that small levels

of housing and / or population growth in these areas may trigger sufficient demand for improved facilities.

Table 9-3: Requirement for Community Space (sqm)

	2016	2025
Ely	36	189
Soham	93	329
Littleport	24	117
Rest of District North	63	177
Rest of District South	56	252
Total	273	1064

Libraries

- 9.13 Growth in Ely and Soham is sufficient to trigger additional library provision and in each case.

Table 9-4: Requirement for Library Space (sq.m), by Growth Location

	2016	2025
Ely	10	51
Soham	25	89
Littleport	7	32
Rest of District North	17	48
Rest of District South	15	68
Total	74	288

- 9.14 While population growth in the individual areas is insufficient to trigger the demand for new library facilities the cumulative impact of housing growth across the whole of East Cambridgeshire may be sufficient. However, Cambridgeshire County Council have stated that their preference would be to expand and concentrate provision on existing sites.

Art Facilities

- 9.15 Table 9-5 sets out the additional requirements for arts facilities across East Cambridgeshire. Arts facilities can include galleries, multi-use art centres, theatres and art production space. The standard sets out in Table 9-1 for art provision can include the provision of one of these facilities within the 45 sq m standard or a combination of a number of facilities. It should be noted however that these standards are for the provision of culture at the local level due to local population growth. Regional provision falls outside the scope of this study and would need to be assessed separately within other planning policies.

Table 9-5 Requirement for Art Facilities (sq.m)

	2016	2025
Ely	15	77
Soham	38	133
Littleport	10	47
Rest of District North	26	72
Rest of District South	23	102
Total	111	431

9.16 The appropriate facility type would need to be decided within each area in response to local issues. However, the figures identified in the table above provide an indication of the amount of space that could be supported.

Museum

9.17 Table 9-6 sets out the additional requirements for museum facilities across East Cambridgeshire.

Table 9-6 Requirement for Museum Space (sq.m)

	2016	2025
Ely	9	48
Soham	24	83
Littleport	6	29
Rest of District North	16	45
Rest of District South	14	64
Total	69	268

COMMUNITY FACILITIES OVERVIEW AND COSTS

9.18 The following table provides a summary overview of the community facilities requirements required. A more detailed table (Table 9-8) providing details of costs is provided at the end of this section. The assumptions set out in this chapter represent an early stage in the process of assessing community facility requirements and should be considered only as a preliminary response in respect of the strategic growth scenarios

Table 9-7: Overview of Community Facility Requirements

	LDF
Ely	189 sq m community space; 77 sq m arts space, 48 sq m museum space; 51 sq m library space
Soham	329 sq m community space; 133 sq m arts space; 83 sq museum space, 89 sq m library space
Littleport	117 sq m community space; 47 sq m arts space; 29 sq m museum space, 32 sq m library space
Rest of District North	177 sq m community space; 72 sq m arts space, 45 sq m museum space, 48 sq m library space
Rest of District South	252 sq m community space; 102 sq m arts space; 64 sq m museum space, 68 sq m library space

Community Facilities Costs

Table 9-8: Community Facility Infrastructure Costs and Phasing (LDF Scenario)

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Community Facilities	189 sq m community space	Ely	£310,716	£0	
Community Facilities	77 sq m arts space	Ely	£96,250	£0	
Community Facilities	48 sq m museum space	Ely	£104,352	£0	
Community Facilities	51 sq m library space	Ely	£153,000	£0	
Community Facilities	329 sq m community space	Soham	£540,876	£0	
Community Facilities	133 sq m arts space	Soham	£166,250	£0	
Community Facilities	83 sq m museum space	Soham	£180,442	£0	
Community Facilities	89 sq m library space	Soham	£267,000		
Community Facilities	117 sq m community space	Littleport	£192,348	£0	
Community Facilities	47 sq m arts space	Littleport	£58,750	£0	
Community Facilities	29 sq m museum space	Littleport	£63,046		
Community Facilities	32 sq m library space	Littleport	£96,000	£0	
Community Facilities	177 sq m community space	Rest of District North	£290,988	£0	
Community Facilities	72 sq m arts space	Rest of District North	£90,000	£0	
Community Facilities	45 sq m museum space	Rest of District North	£97,830	£0	
Community Facilities	48 sq m library space	Rest of District North	£144,000	£0	
Community Facilities	252 sq m community space	Rest of District South	£414,288	£0	
Community Facilities	102 sq m arts space	Rest of District South	£127,500	£0	
Community Facilities	64 sq m museum space	Rest of District South	£139,136	£0	
Community Facilities	68 sq m library space	Rest of District South	£204,000	£0	
Total Assumed Infrastructure Costs					£3,736,772
Total Assumed Funding					£0
Total Assumed Funding Gap					£3,736,772

10. Sports Space and Facilities

POLICY REVIEW

National Policy Guidance

- 10.1 Sports and recreation facilities can assist in creating sustainable communities by making an important contribution to the physical infrastructure of communities. They can provide a social focus and positively influence people's perception of their neighbourhood.
- 10.2 The Rural White Paper **Our Countryside: the Future – A Fair Deal for Rural England** highlights that access to cultural and sporting activity helps to provide an increased quality of life for rural communities and encourages all local authorities to develop local cultural strategies which are based on a partnership approach and encompass sport, countryside, parks and tourism as well as arts, cultural heritage and libraries.
- 10.3 **Planning Policy Guidance 17: Sports and Recreation (PPG17; ODPM, 2002)** outlines the use of planning obligations to secure sports and recreation facilities to meet the requirements of new residential communities.
- 10.4 The **Draft National Planning Policy Framework (NPPF)(October 2011)** highlights the importance of delivering sports and recreational facilities in order to foster sustainable communities. The NPPF highlights the important contribution sports and recreation facilities make to the health and well-being of communities and acknowledges that the planning system has an important role in helping to create an environment where activities are made easier and public health can be improved.
- 10.5 Further priorities established by Sport England for the future provision of sport include:
- Preventing the loss of facilities or natural resources or replacing equivalently, or better, in a suitable location
 - Maintaining current and future demand for local, quality playing fields (i.e. no loss in supply or quality should occur because of development)
 - Promoting shared use sites to increase provision in appropriate locations
 - Utilise the urban fringe for sporting opportunities requiring larger areas such as golf courses and pitches and for built facilities which helps to maintain the identity of this resource
 - Promoting floodlit synthetic turf pitches and hard-surfaced multi-use games areas as an integral part of community sports provision

Local Policy

- 10.6 **The Sports Facilities and Play Area Assessment Report (2005)** illustrated the current supply and demand analysis for East Cambridgeshire, based on a national model which identified the recommended provision for the current population and identified the district's sports requirements to 2021.

- 10.7 The standards and requirements set out in the Sports Facilities and Play Area Assessment Report are in need of revision in light of the development that has occurred across East Cambridgeshire since 2005. However, in the absence of more recent information the standards and recommendations set out in that report will form the basis of our approach to identifying sports facility requirements.
- 10.8 **The Leisure Needs Assessment (2007)** examines demand for the procurement and development of leisure facilities in Ely. This study applies the methodology and sources set out in this report to identify the predicted demand for sports and leisure in Ely.

EXISTING PROVISION

Overview of Provision

- 10.9 According to the 2009 East Cambridgeshire Place Survey only 34% of local residents made use of local sports or leisure facilities at least once a month and only 40% were satisfied with local levels of provision. This is the lowest level of satisfaction across Cambridgeshire.

Built Facilities

- 10.10 The Sports Facilities and Play Area Assessment Report (2005) identified the following issues concerning the built leisure facilities within the district:
- The assessment identified a requirement for sports courts within the district. It suggests that this could be delivered through expansion of the Paradise Centre and provision of a new facility at Ely, both of which must be easily accessible by public transport.
 - Further provision of sports halls could be delivered by opening up existing school halls in Ely and Witchford for formal community uses.
 - The provision of future swimming pools will be subject to a more detailed feasibility study however the preferred option is for a maximum six lane facility within Ely.
 - Future provision of Synthetic Turf Pitches (STPs) should be focused within the larger settlements, notably Ely and Littleport.
- 10.11 The assessment provides standards for the future provision of open space and built leisure facilities, which are presented in the following section.

Sport and Recreational Spaces

- 10.12 The Sports Facilities and Play Area Assessment Report (2005) identified that in 2005 there were 99 pitches in secured community use in East Cambridgeshire, occupying 95.7 ha of land (or 1.33 ha per 1,000 people). It identified that overall the quality of pitches and ancillary facilities (including changing rooms) is fair, however improvements are required in some areas to ensure that all pitches are capable of two matches per week and that facilities are suitable for all users.

Other key issues identified by the assessment included:

- There may be a need to reorganise and rationalise football pitch provision within the district as some pitches are not in the appropriate locations
- A central venue for netball (potentially King’s School, Ely) should be investigated

INFRASTRUCTURE DEMAND**Sports Facilities Approach**

10.13 As identified above, standards from the East Cambridgeshire Sports Facilities and Play Area Assessment 2005 have been used to determine the appropriate level of sports facilities that should be provided to ensure that increased housing does not place additional pressure on existing facilities. These are set out in the following table and are applied to the development specific population growth projections set out in Chapter 0.

10.14 Leisure proposals in Ely are based on the 2007 Leisure Needs Assessment which identifies a current under-provision of swimming pool space of 378m². Future demand for swimming pool space is then calculated using the Sports Facility Calculator and then increased with an assumption of 10% increase in participation, as recommended by the 2007 study.

Table 10-1: Minimum Sports Provision

Facility	Standard
Pitches	1.33 ha/1000 people
Tennis	0.03 ha/1000 people
Bowls	0.044 ha/1000 people
Netball	0.014 ha/1000 people
Floodlit Multi Games Areas	0.038 ha/1000 people
Sports halls	0.26 courts/1000 people
Swimming pools	9.29 m ² /1000 people
STPs Synthetic turf pitches	0.03 pitches/1000 people

Source: East Cambridgeshire Sports Facilities and Play Areas Assessment 2005

Sports Facilities Infrastructure Demand

10.15 The following table identifies the sports facilities requirements associated with the LDF housing growth scenarios. They are based on the requirements per 1,000 people presented above and set out in the Sports Facilities and Play Areas Assessment (2005).

10.16 Outstanding housing growth demonstrates that there is sufficient demand for playing pitches (assuming an average size of 1.3 ha per pitch) within each of the 5 sub-areas. There is also sufficient demand for tennis courts, bowling greens and FMGAs.

10.17 The District wide requirement for sports halls and swimming pool provision identified in the Sports Facilities and Play Areas Assessment (2005) will be met through the provision of a Leisure Centre at Ely. Planning permission was granted for a Leisure Centre at Ely in 2010, including a 6 lane swimming pool, a 5 court sports hall and 100 fitness stations.

Table 10-2: LDF Sport and Recreation Requirements

5 Sub-Areas	Pitches (ha)	Tennis (ha)	Bowls (ha)	Netball (ha)	Floodlit Multi-Games Areas (ha)	Sports Halls (Courts)*	Swimming Pools (m2)	Synthetic Turf Pitches (Pitches)
Ely	2.3	0.5	0.7	0.0	0.1	0.4	15.8	0.1
Soham	3.9	0.9	1.3	0.0	0.1	0.8	27.5	0.1
Littleport	1.4	0.3	0.5	0.0	0.0	0.3	9.8	0.0
Rest of District North	2.1	0.5	0.7	0.0	0.1	0.4	14.8	0.0
Rest of District South	3.0	0.7	1.0	0.0	0.1	0.6	21.1	0.1
Total	12.7	2.9	4.2	0.1	0.4	2.5	89.0	0.3

* Calculation does not include existing under-provision and 10% increase in supply. This is factored into the recommended facilities in line with the 2007 Leisure Needs Assessment

10.18 It should be noted that recommendations for sports facilities in this chapter are not intended to be final. It is likely that areas that have high growth may require extra facilities for young people, for example informal sports areas, kick about areas, or skate parks, and that improvements and expansion to existing facilities could be required alongside additional housing growth.

SPORTS AND RECREATION OVERVIEW AND COSTS

10.18 Table 10-3 sets out an overview of sports and recreation infrastructure requirements based on the demand identified in the previous section.

Table 10-3 Overview of Sports and Recreation Requirements

	LDF
Ely	2.3 ha playing pitches; 1 bowling green; 1 FMGA
Soham	3.9 ha playing pitches; 1 tennis court; 1 bowling green; 1 FMGA
Littleport	1.4ha playing pitches
Rest of District North	2.1ha playing pitches; 1 bowling green; 1 FMGA
Rest of District South	3.0 ha playing pitches; 1 tennis court; 1 bowling green; 1 FMGA; 1 Sports hall
Ely, Soham, Littleport and North of District	1 Leisure centre

Sports and Recreation Space Costs

Table 10-4: Sports and Recreation Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Sport and Recreation	Playing Pitches (2.3 ha)	Ely	£425,500	£0	
Sport and Recreation	1 bowling green	Ely	£80,000	£0	
Sport and Recreation	1 FMGA	Ely	£120,000	£0	
Sport and Recreation	1 leisure centre (incl. 6-lane swimming pool, 5 court sports hall and 100 fitness stations)	Ely, Soham, Littleport and Rest of District North.	£11,521,440	£0	
Sport and Recreation	Playing Pitches (3.9 ha)	Soham	£721,500	£0	
Sport and Recreation	1 tennis court	Soham	£150,000	£0	
Sport and Recreation	1 Bowling Green	Soham	£80,000	£0	
Sport and Recreation	1 FMGA	Soham	£120,000		
Sport and Recreation	Playing Pitches (1.4 ha)	Littleport	£266,400	£0	
Sport and Recreation	Playing Pitches (2.1 ha)	North of district	£388,500	£0	
Sport and Recreation	1 Bowling Green	North of District	£80,000		
Sport and Recreation	1 FMGA	North of district	£120,000	£0	
Sport and Recreation	Playing Pitches (3.0 ha)	South of district	£555,000	£0	
Sport and Recreation	1 tennis court	South of district	£150,000	£0	
Sport and Recreation	1 Bowling Green	South of district	£80,000	£0	
Sport and Recreation	1 FMGA	South of district	£120,000	£0	
Sport and Recreation	1 Sports Hall	South of district	£680,000	£0	
Total Assumed Infrastructure Costs			£15,658,340		
Total Assumed Funding			£0		
Total Assumed Funding Gap			£15,658,340		

11. Open Space, and Green Infrastructure

POLICY REVIEW

- 11.1 Within East Cambridgeshire, the **Sports Facilities and Play Area Assessment Report (2005)** identifies the district's play area requirements to 2021.
- 11.2 The standards and requirements set out in the Sports Facilities and Play Area Assessment Report are in need of revision in light of the development that has occurred across East Cambridgeshire since 2005. However, in the absence of more recent information the standards and recommendations set out in that report will form the basis of the approach to identifying play facility requirements.
- 11.3 Standards for informal open space are set out in the **East Cambridgeshire Informal Open Space Assessment**, which identifies a minimum standard of 2.5ha per 1000 people for casual play and informal recreation.
- 11.4 Green Infrastructure requirements are assessed at the strategic countywide level and the requirements of the whole county are set out in **Cambridgeshire Horizons' Green Infrastructure Strategy 2011**. This Strategy demonstrates how Green Infrastructure can be used to help to achieve four objectives:
- To reverse the decline in biodiversity
 - To mitigate and adapt to climate change
 - To promote sustainable growth and economic development
 - To support healthy living and well-being
- 11.5 The Strategy is based on the analysis of public policy and key baseline data grouped into seven themes identified as important elements of Green Infrastructure, biodiversity, climate change, Green Infrastructure gateways, heritage, landscape, publicly accessible open space and rights of way. In addition, three cross-cutting/overarching issues were considered: economic development, health and well-being, and land and water management.
- 11.6 The Strategy identifies potential sites for development, key habitat areas, and highlights how to link green infrastructure creation with the proposed development of Ely, Soham and Littleport which are all identified as target areas.
- 11.7 The **East Cambridgeshire Core Strategy 2009** identifies the provision of a Country Park in Ely, plus other improvements in open space provision across the district.

OPEN SPACE

Overview of Existing Provision

- 11.8 In relation to Open Space, the Sports Facilities and Play Area Assessment Report (2005) identified that there are deficiencies in play provision across much of the district, however these are most pronounced in the larger settlements (Ely, Soham, Littleport, Burwell, and Sutton).
- 11.9 In Soham the Commons provide informal open space on the edge of the city, however these are currently underutilised and there is the potential to improve these areas so that local residents can make better use of them. In Soham and elsewhere the quality of local provision is an essential consideration when planning additional open space, particularly if improvements to existing provision would provide greater benefit to new and existing residents.
- 11.10 Parish Councils have also been asked to determine the local infrastructure requirements that would be triggered by small levels of housing growth in their areas. Youth provision was one of the main areas identified in deficit, and the provision of formal open space could significantly enhance the youth offer in these areas.
- 11.11 Furthermore, the rural nature of the District could be used as a basis for open space provision with the development of additional Rights of Way, Country Parks and long distance walks leading to destinations being a way of meeting a number of needs simultaneously.

Demand for Open Space

- 11.12 Open space standards were set out in the East Cambridgeshire Informal Open Space Study 2005 and play space standards in the East Cambridgeshire Sports Facilities and Play Areas Assessment 2005.

Table 11-1: Open Space Requirements

Open Space	Standard
Informal open space	2.5ha per 1,000 people
Toddler Outdoor Play Space	0.02ha per 1,000 people
Junior Outdoor Play Space	0.08ha per 1,000 people
Youth Outdoor Play Space	0.1ha per 1,000 people

Sports Facilities and Play Areas Assessment 2005

- 11.13 Informal space and play areas would be expected to come forward in a variety of ways, with some informal space being provided as part of and alongside developments and the remainder being provided at strategically accessible locations across the district.
- 11.14 The requirements identified in this chapter are those that are directly linked to housing growth. In areas where local deficiencies are identified, it may also be necessary to increase provision beyond the level set out here.

Open Space Demand

11.15 By applying the standards set out in Table 11-1 to the development specific population set out in Chapter 0 it is possible to project the open space requirements associated with housing growth.

11.16 Over the whole district there is a requirement for 30 ha of open space. Over 16 ha are required within the three market towns. This represents additional open space however, in the case of Soham, East Cambridgeshire District Council indicate that some of this requirement may be met by improving the access to and quality of Soham Common. Informal Open Space will form the majority of new GI developments with smaller provision made for juniors, young people, and toddlers. Informal open space may include country parks, city rivers, riverside open spaces, countryside access, rights of way, and nature reserves.

Table 11-2: LDF Scenario Open Space Requirements (Ha)

5 Sub-Areas	Informal Open Space	Toddler Outdoor Play Space	Junior Outdoor Play Space	Youth Outdoor Play Space	Total Open Space
Ely	4.3	0.03	0.1	0.2	4.6
Soham	7.4	0.06	0.2	0.3	8.0
Littleport	2.6	0.02	0.1	0.1	2.8
Rest of District North	4.0	0.03	0.1	0.2	4.3
Rest of District South	5.7	0.05	0.2	0.2	6.1
Total	24.0	0.19	0.8	1.0	25.9

GREEN INFRASTRUCTURE

Green Infrastructure Requirements

11.17 The major green infrastructure scheme identified for the district is the Ely Country Park. The Ely Country Park Development Plan outlined a three-phase approach to the delivery of the County Park, which will seek to meet the strategic objectives of:

- Conservation and biodiversity improvement
- Improved circulation and sustainable movement
- The provision of facilities to encourage community engagement with the site and use it more frequently.

11.18 Phase 1 of the project aims to develop the majority of the built infrastructure proposed for the Country Park. This includes the development of a play space, visitor's centre, car park, new footpaths and cycle routes. Phase 1 will also aim to improve the ecological capacity of the site with additional landscaping to enhance the current nature of the Pocket Park and Ely Common areas of the site.

11.19 It is proposed that this new / improved infrastructure be located in areas of least ecological sensitivity and consequently the site is projected to improve

the quality of the landscape without causing any negative impacts on the surrounding area's ecological capacity or social function.

11.20 Phase 2 of the Country Park development aims to develop further the circulation of people throughout the site and within Ely with further enhancements of footpaths and cycleways. In parallel to this, additional habitat creation and active conservation of the sites most sensitive areas will be promoted strongly in Phase 2.

11.21 Phase 3 outlined a number of aspirational visions for Ely Country Park including new engineering work to link the County Wildlife Site (CWS) on the south of the Great River Ouse to the Country Park and further access improvements to the south of the site.

11.22 Ely and a number of other Parishes in East Cambridgeshire suffer from a deficiency of open space (formal and informal) and green infrastructure. The size of the Ely Country Park development will go some way to redressing the open space deficit identified in Ely and other East Cambridgeshire parishes. The provision of a multi-functional location that provides facilities for formal and informal use the site will provide a much-needed location that has the capacity to allow a high number of simultaneous visits.

11.23 Although the site will be able to accommodate a high number of users simultaneously it will still only partially meet the ANGSt standards. Most residents within the city will be within a 2-kilometre walk but some residents in the western and northern areas of Ely may not. Therefore although the Country Park will provide a location that meets the accessible 20 ha site within two kilometres for most Ely residents this will not be the case for all.

11.24 Ely Country Park is however a strategic project that acknowledges the potential development projected for Ely (especially Ely North). Its size and location have therefore been identified as a way of meeting some of the future open space/green infrastructure needs. However, with an increased population further developments will be needed locally to provide a network of spaces that function on the street of community level. The Country Park adds an infrastructure for the City but should not be seen as a way of meeting all the deficiency targets.

11.25 The development of additional open space / green infrastructure therefore needs to assess each location/parishes individually to meet their deficiencies in the first instance. Physical Links and wider lineages between locations, people, and the landscape can subsequently be developed after the immediate needs for facilities and spaces are met at a localised level.

11.26 In addition to the Country Park, other projects have been identified and set out in the Cambridgeshire Green Infrastructure Strategy 2011. The Strategy divides Cambridgeshire into Strategic Areas with Strategic Area projects. These Strategic Areas are further broken down into Target Areas. Each of the Target Areas contain a list of projects that help deliver green infrastructure for

the Target Area, and therefore contribute to the four objectives of the strategy that were outlined above at paragraph 11.4.

11.27 The Strategy does not identify the costs associated with the provision of this green infrastructure but it does identify CIL as a potential source of funding. Green infrastructure projects identified in the Strategy that are located wholly or partly in East Cambridgeshire are outlined in Table 11-3.

Table 11- 3 – Strategic green infrastructure

Strategic Area	Strategic Area Projects	Target Area	Target Area Projects
Strategic Area 4: Eastern Fens and Towns	Fens Adventurers Partnership: Green Fen Way (The Green Fen Way project aims to make significant improvements to countryside access networks (both Public Rights of Way (PRoW) and permissive paths) in the Fens Adventurers area with the aim of benefiting rural tourism and businesses.) The Fens Waterways Link (FWL) will enhance river navigation to connect the Cathedral Cities of Lincoln, Peterborough and Ely as well as King's Lynn, Denver, March, Ramsey, Huntingdon and Cambridge.	Littleport	Littleport Urban Greenway
			New River Town Park
			Cycleway Improvements
			Woodland Creation
		Ely	Ely Country Park
			<i>Woodland Creation</i>
			<i>North Ely Development</i>
			<i>Ouse SuDS</i>
		Soham	Soham Commons Restoration
			Improved public open space and town parks
Ely Ouse	Environmental stewardship schemes		
	Eastern Gateway Green Infrastructure expansion		
Strategic Area 5: Chippenham Fen		Chippenham Fen	Continued reserve management
			Water management investigation
Strategic Area 6: Cambridge and surrounding Areas		Wicken Fen and Anglesey Abbey	Wicken Fen Vision
			Wicken Fen Nature Trails

Source: Cambridgeshire Green Infrastructure Strategy 2011

OPEN SPACE AND GREEN INFRASTRUCTURE OVERVIEW AND COSTS

Open Space and Green Infrastructure Requirements

11.27 Table 11-3 sets out an overview of open space and green infrastructure requirements. The total provision of open space is directly linked to the total number of dwellings.

Table 11-3 Overview of open space Requirements

	LDF
Open Space	24 ha Informal Open Space; 0.2 ha Toddler Outdoor Play Space; 0.8 ha Junior Outdoor Play Space; 1 ha Youth Outdoor Play Space
Green Infrastructure	Ely Country Park

- Open Space and Green Infrastructure Costs

The following table presents the costs and funding associated with the open space and green infrastructure requirements. Development specific provision of informal open space and land for play areas would normally be funded through s.106 and contributions towards play facilities and other recreational equipment and strategic green infrastructure could be funded through CIL.

Table 11-4: Open Space and Green Infrastructure Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Open Space	Informal Open Space (4.3 ha)	Ely	£860,000	£860,000	S.106
Open Space	Junior Outdoor Play Space (0.1 ha)	Ely	£50,000	£50,000	S.106
Open Space	Youth Outdoor Play Space (0.2 ha)	Ely	£100,000	£100,000	S.106
Open Space	Toddler Outdoor Play Space (0.03 ha)	Ely	£19,500	£19,500	S.106
Open Space	Informal Open Space (7.4 ha)	Soham	£1,480,000	£1,480,000	S.106
Open Space	Toddler Outdoor Play Space (0.06 ha)	Soham	£39,000	£39,000	S.106
Open Space	Junior Outdoor Play Space (0.2 ha)	Soham	£100,000	£100,000	S.106
Open Space	Youth Outdoor Play Space (0.3 ha)	Soham	£150,000	£150,000	S.106
Open Space	Informal Open Space (2.6 ha)	Littleport	£520,000	£520,000	S.106
Open Space	Junior Outdoor Play Space (0.1 ha)	Littleport	£50,000	£50,000	S.106
Open Space	Youth Outdoor Play Space (0.1 ha)	Littleport	£50,000	£50,000	S.106
Open Space	Toddler Outdoor Play Space (0.02 ha)	Littleport	£13,000	£13,000	S.106
Open Space	Informal Open Space (4.0 ha)	North of district	£800,000	£800,000	S.106
Open Space	Junior Outdoor Play Space (0.1 ha)	North of district	£50,000	£50,000	S.106
Open Space	Youth Outdoor Play Space (0.2 ha)	North of district	£100,000	£100,000	S.106
Open Space	Toddler Outdoor Play Space (0.03 ha)	North of district	£19,500	£19,500	S.106
Open Space	Informal Open Space (5.7 ha)	South of District	£1,140,000	£1,140,000	S.106
Open Space	Toddler Outdoor Play Space (0.05 ha)	South of District	£32,500	£32,500	S.106
Open Space	Junior Outdoor Play Space (0.2 ha)	South of District	£100,000	£100,000	S.106
Open Space	Youth Outdoor Play Space (0.2 ha)	South of District	£100,000	£100,000	S.106
Open Space	Ely Country Park	ECDC	£850,000	£0	
Total Assumed Infrastructure Costs			£6,623,500		
Total Assumed Funding			£5,773,500		
Total Assumed Funding Gap			£850,000		

12. Transport Infrastructure

INTRODUCTION

- 12.1 This study provides a high level review of the key infrastructure requirements given the Core Strategy growth projections for East Cambridgeshire. The infrastructure requirements listed in this chapter are based on requirements identified in the East Cambridgeshire Infrastructure Investment Framework and have been updated in collaboration with Cambridgeshire County Council.
- 12.2 The requirements identified have been based upon a review of the policy and strategy documents relevant to the area, discussions with key stakeholders and an appreciation of the major transportation issues facing the district. Detailed modelling work has not been undertaken as part of this study. .
- 12.3 While a significant amount of work has been undertaken by the District and County Councils to consider future growth and impacts on the transport network there is a need to undertake further transportation work to further inform the transport evidence that is currently available and inform consideration of the detailed infrastructure and costs required to cater for growth.

KEY TRANSPORT ISSUES

- 12.4 Following a review of the main policy and strategy documents and discussions with stakeholders, a range of broad transport issues have been identified. The majority of these are current issues, however it is also believed that if not addressed, these will present significant barriers to delivering the projected levels of development for the region. These main issues are listed below. While they are categorised based upon the mode of transport for which they directly refer, a number of the issues are related across the modes.

Highways

- The operation of the A142 between Angel Drove and Stuntney Causeway
- Congestion on the A10 corridor between Ely and Cambridge
- The operation of the A14 junctions with the A10, the A142 and the B1047
- Junction capacity within the main settlements

Rail

- Concerns relating to the capacity of existing passenger services
- Future impact on the level crossing of additional use of the rail line through Ely by freight
- The need to redevelop the rail station to provide an attractive multi-modal interchange facility

Bus Services

- A lack of buses serving rural areas

- A need for additional services along key corridors
- Poor connectivity within urban areas to key destinations, particularly Ely rail station
- Lack of bus priority and park and ride sites to encourage use of the bus on a congested highway network

Walking & Cycling

- A general lack of quality facilities
- Poor connectivity to key destinations
- Increasing severance of the highway network as a result of increased traffic flows.

12.6 These issues are generally reflective of the key transport characteristics of East Cambridgeshire, with the rural nature of the district combined with the relative lack of local employment opportunities resulting in high levels of commuter trips, particularly by car, putting pressure on the strategic transport networks. There are also concerns relating to the coverage and quality of the public transport, walking and cycling networks, which also contribute to the high car use.

12.7 A number of potential infrastructure improvements have been identified to address these issues and provide a foundation for the future growth for the region. A common theme throughout these issues is the high level of vehicle trips and the lack of suitable alternatives. The spatial strategy acknowledges that there is a need for balanced, sustainable development within the district. This requires development to be appropriately located, with a mix of uses, and strong sustainable transport links between the growth areas and to other key destinations.

12.8 The location, design and infrastructure associated with new development would be expected to reduce the need to travel and encourage walking, cycling and public transport over individual private car use. As part of this approach, new developments would generally be expected to have a relevant travel plan which may include a package of measures such as new cycling facilities, car clubs, car sharing and shuttle buses, while there would also be expected to be a degree of parking constraint based upon Cambridgeshire's maximum standards.

IDENTIFIED TRANSPORT IMPROVEMENTS

12.11 Table 12-1 lists identified transport infrastructure requirements and is based on work carried out by AECOM for the East Cambridgeshire Infrastructure Investment Framework which has been updated in consultation with Cambridgeshire County Council

12.12 Table 12-2 presents the costs and funding associated with transport infrastructure requirements.

Table 12-1 Transport Infrastructure requirements

Infrastructure Need/Requirement	Identification	Notes
1. Highways		
<p>Highways Improvements associated with the expansion of Ely to the north including:</p> <ol style="list-style-type: none"> 1. Fourth arm at the B1382 Ely Road / Prickwillow Road / Kings Avenue roundabout 2. New Access Road from B1382 Ely Road / Prickwillow Road / Kings Avenue roundabout to the A10 North New signalised junction between New A10 Access Road and Lynn Road 3. New Access Road leading to Cam Drive with a new roundabout on the A10 	Ely Modelling Report (See No 1 - Figure 3.2)	<p>Delivered as part of the development of the Northern Expansion Area - will require additional assessment as part of updated Ely Saturn Model</p> <ol style="list-style-type: none"> 1. <i>Modelling assumes up to 1,000 dwellings</i> 2. <i>Modelling assumes above 1,000 dwellings</i> 3. <i>Modelling assumes above 1,000 dwellings</i>
Improvements to the A142 between Angel Drove and Stuntney Causeway (Possible Southern Link Road Scheme)	Ely Modelling Report (See No 2) + Policy & Strategy Documentation	<p>Improvements to the A142 are seen as vital given additional traffic growth and potential increases in the closure of the level crossing given increased rail freight, and to deliver improvements to the railway station. The County Council plans to deliver the scheme through prudential borrowing, with repayments made over time by direct beneficiaries of the scheme. Developer funding, through directly negotiated payments or through CIL will need to be part of this funding package if delivery is to be achieved.</p> <p><i>The current need for this project is not due to growth, however a scheme to relieve the area around the crossing will be required to facilitate growth.</i></p>
Dualling of the A10 between A142 Witchford Road and A142 Angel Drove	Ely Modelling Report (See No 3 - Figure 3.2)	Identified to relieve traffic pressure associated with the development of Lancaster Way. Will require additional assessment as part of updated Ely Saturn Model
Improvements to Queen Adelaide Way, with junction improvements with the A142 and a new link with Prickwillow Road	Ely Modelling Report (See No 3 - Figure 3.2)	<p>To relieve pressure associated with the growth around the north-east of the city. Will require additional assessment as part of updated Ely Saturn Model</p> <p>Modelling assumes 1,000 dwelling capacity at present</p>
Junction improvements along the A10 in Ely	Core Strategy	Will require additional assessment as part of updated Ely Saturn Model
Improvements to the A142 East Fen Common Junction	Core Strategy	Subject to additional individual assessment

Infrastructure Need/Requirement	Identification	Notes
Improvements to the Witcham Toll Junction	Core Strategy	Subject to additional individual assessment
Improvements to the A142 Barway Junction	Core Strategy	Subject to additional individual assessment
Improvements to the A142 James Black Junction	Core Strategy	Will require additional assessment as part of updated Ely Saturn Model
Capacity Improvements to A10 between Ely and Cambridge	Ely Masterplan	Requires further assessment and will be subject to impact of public transport improvements on this corridor.
Improvements to the A14 / A10 Junction (Milton Interchange)	Discussions with HA	<p>Identified by the HA as a serious concern. Significant capacity improvements are unlikely. East Cambridgeshire development to be sustainable to minimise impact at junction</p> <p><i>This scheme is not wholly down to ECDC growth, however HA may have concerns over further impact from development especially in the higher growth projections. Scheme costs of £5,000,000 discounted by 50% in infrastructure cost calculations to reflect this.</i></p>
Improvements to the A14 / A142 Junction (Exton Interchange)	Discussions with HA	<p>Identified by the HA as a serious concern. Significant capacity improvements are unlikely. East Cambridgeshire development to be sustainable to minimise impact at junction</p> <p><i>This scheme is not wholly down to ECDC growth, however HA may have concerns over further impact from development especially in the higher growth projections. Scheme costs of £5,000,000 discounted by 50% in infrastructure cost calculations to reflect this.</i></p>
Improvements to the A14 / B1049 (Histon Interchange)	Discussions with HA	<p>Identified by the HA as a serious concern. Significant capacity improvements are unlikely. East Cambridgeshire development to be sustainable to minimise impact at junction</p> <p><i>This scheme is not wholly down to ECDC growth, however HA may have concerns over further impact from development especially in the higher growth projections. Scheme costs of £5,000,000 discounted by 50% in infrastructure cost calculations to reflect</i></p>

Infrastructure Need/Requirement	Identification	Notes
		<i>this.</i>
2. Railways		
New Chesterton Railway Station	http://www.cambridge-news.co.uk/cn_news_home/DisplayArticle.asp?ID=452586	Included as part of bid for TIF funding. Second stage for remaining funding for £500m transport improvements in 2010 but was unsuccessful, is likely to be part of future bids.
Enhanced Passenger Rail Services with improvements to London to Cambridge Services	http://www.networkrail.co.uk/asp/4451.aspx	Network Rail West Anglia Route Plan. While these apply directly to services between London and Cambridge, they may be extended to begin / end at Ely.
Increase in frequency on Norwich to Cambridge services to half hourly (currently hourly)	http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/greater%20anglia/greater%20anglia%20rus.pdf	Greater Anglia RUS 2007 established that this would not offer value for money until the completion of work at Ely North Junction - currently scheduled for the 2014 - 2019 period.
Increased car parking and improved interchange facility at Ely Rail Station	Discussions with Rail Companies	Current issues with connectivity of station. In conjunction with possible Tesco development and improved PT interchange but tied to A142 improvements scheme
New Station at Soham	Discussions with Rail Companies	The scheme is at a preliminary stage. The scheme is feasible and the final cost of a two platform station is around £4,700,000. Patronage that would be achieved would justify train services stopping at Soham, and would relieve some pressure on the A142 and other routes.
3. Road-Based Public Transport		
Bus enhancement measures in Ely town centre including the closure of New Barnes Avenue to through traffic to provide less congested bus route, bus gate on Brays Lane and signal control at the junction of Kings Avenue / Lynn Road	Ely Modelling Report (See No 3 - Figure 3.2)	In connection with new shuttle bus service between Littleport and Ely Rail Station / Tesco
Improvements to bus interchange facilities, particularly Ely City Centre, Ely Railway Station, Soham Town Centre	Core Strategy / Ely Market Town Transport Strategy	
Provision of real-time bus information and improvements to bus infrastructure - including new shelters, low floor build ups, better signage, information and marketing	Core Strategy / Ely Market Town Transport Strategy	Ely Market Town Transport Strategy indicates a cost of circa £100 - £150K to upgrade the bus stops on the 9, 9A and X9 routes between Ely and Littleport
Introduction of bus priority measures on the A10 - to	Core Strategy / Ely Masterplan	

Infrastructure Need/Requirement	Identification	Notes
encourage mode-shift on key Ely to Cambridge corridor		
Demand responsive transport schemes within rural areas to facilitate access to urban areas - e.g. Dial a ride	Core Strategy / LTP	
Enhancement of existing bus frequencies and support for additional services within all main settlements, including new services between Littleport and Ely and serving Ely rail station	Core Strategy	
New Park & Ride Site off the A10 near Ely	Ely Masterplan Transport and Access Statement / LTP	Will require assessment as part of any future work looking at capacity on the A10 corridor. <i>Not wholly attributable to development, so infrastructure costs discounted by 50% in cost calculations.</i>
4. Walking and Cycling		
Pedestrian area streetscape enhancements in Ely and Soham centre	Ely Masterplan	
New cycle bridge over the A10 with upgraded bridle link to Lancaster Way	Ely Modelling Report (See No 3 - Figure 3.2)	
Provision of additional cycle routes within Ely to improve connectivity, particularly to the centre and railway station	Ely Masterplan / Ely Market Town Transport Strategy	
A10 Stretham to Little Thetford	Core Strategy	
A142 Sutton to Witchford	Core Strategy	
B1102 Lode to Stow-cum-Quy	Core Strategy	
Burwell Village Network and link to Exning	Core Strategy	
Soham Town Network	Core Strategy	
Water beach to Wicken Fen, including Upware Bridge	Core Strategy	
Connect2 cycle route between Cambridge and Wicken Fen	Core Strategy	
General Improvements to cycling infrastructure in Soham and Littleport	Core Strategy	
5. Other Schemes		
Development and Instigation of Workplace and Residential Travel Plans		All new development should be supported by a travel plan promoting sustainable modes of transport

Infrastructure Need/Requirement	Identification	Notes
Station Travel Plan	Discussions with Rail Companies	
Development of Car Parking Strategy for Ely	Ely Masterplan	
Promotion of Camshare	LTP	

Table 12-2 Transport Infrastructure Costs

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
Transport	Highways: Ely Transport Improvements: Fourth arm at the B1382 Ely Road / Prickwillow Road / Kings Avenue roundabout	Ely/Littleport/ North of District	£500,000	£0	
Transport	Highways: Ely Transport Improvements: New Access Road from B1382 Ely Road / Prickwillow Road / Kings Avenue roundabout to the A10 North	Ely/Littleport/ North of District	£1,750,000	£0	
Transport	Highways: Ely Transport Improvements: New signalised junction between New A10 Access Road and Lynn Road	Ely/Littleport /North of District	£450,000	£0	
Transport	Highways: New Access Road leading to Cam Drive with a new roundabout on the A10	Ely/Littleport/ North of District	£2,000,000	£0	
Transport	Highways: Improvements to the A142 between Angel Drove and Stuntney Causeway (Possible Southern Link Road Scheme)	ECDC	£28,000,000	£0	
Transport	Highways: Dualling of the A10 between A142 Witchford Road and A142 Angel Drove	ECDC	£2,000,000	£0	
Transport	Highways: Improvements to Queen Adelaide Way, with junction improvements with the A142 and a new link with Prickwillow Road	Ely/Littleport/ North of District	£3,525,000	£0	
Transport	Highways: Junction improvements along the A10 in Ely	ECDC	£1,500,000	£0	
Transport	Highways: Improvements to the A142 East Fen	ECDC	£500,000	£0	

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
	Common Junction				
Transport	Highways: Improvements to the Witcham Toll Junction	Ely/Littleport/ North of District	£500,000	£0	
Transport	Highways: Improvements to the A142 Barway Junction	ECDC	£500,000	£0	
Transport	Highways: Improvements to the A142 James Black Junction	ECDC	£500,000	£0	
Transport	Highways: Capacity Improvements to A10 between Ely and Cambridge	ECDC	£17,375,000	£0	
Transport	Highways: Improvements to the A14 / A10 Junction (Milton Interchange)	ECDC	£2,500,000	£0	
Transport	Highways: Improvements to the A14 / A142 Junction (Exning Interchange)	ECDC	£3,500,000	£0	
Transport	Highways: Improvements to the A14 / B1049 (Histon Interchange)	ECDC	£4,000,000	£0	
Transport	Rail-Based Public Transport: New Chesterton Railway Station	ECDC	£6,000,000	£6,000,000	
Transport	Rail-Based Public Transport: Enhanced Passenger Rail Services with improvements to London to Cambridge Services	ECDC	£0	£0	
Transport	Rail-Based Public Transport: Power supply upgrades to enable longer trains to operate out of Cambridge	Ely/Littleport/ Dowham Market/Kings Lynn	£0	£0	
Transport	Rail-Based Public Transport: Increase in frequency on services to Stansted Airport to half hourly (currently hourly)	East Cambridgeshire/ Cambridge City/South Cambridgeshire	£0	£0	
Transport	Rail-Based Public Transport: Increase in frequency on Peterborough to Ipswich services to hourly (currently bi-hourly)	ECDC	£0	£0	
Transport	Rail-Based Public Transport: Increased car parking and improved interchange facility at Ely Rail Station	ECDC	£1,000,000	£0	
Transport	Rail-Based Public	ECDC		£0	

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
	Transport: New Station at Soham		£4,700,000		
Transport	Rail-Based Public Transport: Extension to Littleport station car park	Littleport	£500,000		
Transport	Road Based Public Transport: Bus enhancement measures in Ely town centre: closure of New Barnes Avenue to through traffic	Ely/Littleport/ Soham/North of District	£666,667	£0	
Transport	Road Based Public Transport: Bus enhancement measures in Ely town centre: bus gate on Brays Lane	Ely/Littleport/ Soham/North of District	£666,667	£0	
Transport	Road Based Public Transport: Bus enhancement measures in Ely town centre: signal control at the junction of Kings Avenue / Lynn Road	Ely/Littleport/ Soham/North of District	£666,667	£0	
Transport	Road Based Public Transport: Improvements to bus interchange facilities, particularly Ely City Centre, Ely Railway Station, Soham Town Centre	Ely/Littleport/ Soham/North of District	£120,000	£0	
Transport	Road Based Public Transport: Provision of real-time bus information and improvements to bus infrastructure - including new shelters, low floor build ups, better signage, information and marketing	ECDC	£1,250,000	£0	
Transport	Road Based Public Transport: Introduction of bus priority measures on the A10 - to encourage mode-shift on key Ely to Cambridge corridor	ECDC	£700,000	£0	
Transport	Road Based Public Transport: Demand responsive transport schemes within rural areas to facilitate access to urban areas - e.g. Dial a ride	ECDC	£4,000,000	£0	
Transport	Road Based Public Transport: Enhancement of existing bus frequencies and	ECDC	£4,000,000	£0	

Infrastructure Category	Name	Growth Location	Total Costs	Total Funding	Funding Source
	support for additional services within all main settlements, including new services between Littleport and Ely and serving Ely rail station				
Transport	Road Based Public Transport: New Park & Ride Site off the A10 near Ely	ECDC	£1,050,000	£0	
Transport	Walking and Cycling: Pedestrian area streetscape enhancements in Ely and Soham centre	Ely	£500,000	£0	
Transport	Walking and Cycling: New cycle bridge over the A10 with upgraded bridle link to Lancaster Way	Ely/north of district	£1,000,000	£0	
Transport	Walking and Cycling: Provision of additional cycle routes within Ely to improve connectivity, particularly to the centre and railway station	Ely	£700,000	£0	
Transport	Walking and Cycling: A10 Stretham to Little Thetford	Ely/ North of District	£900,000	£0	
Transport	Walking and Cycling: A142 Sutton to Witchford	Ely/north of district	£1,500,000	£0	
Transport	Walking and Cycling: Burwell Village Network and link to Exning	Burwell	£1,000,000	£0	
Transport	Walking and Cycling: Soham Town Network	Soham	£100,000	£0	
Transport	Walking and Cycling: Connect2 cycle route between Cambridge and Wicken Fen	ECDC	£3,000,000	£0	
Transport	Walking and Cycling: General Improvements to cycling infrastructure in Soham and Littleport	Soham	£6,000	£0	
Transport	Smarter choices measures to promote sustainable growth, including residential and workplace travel plans	ECDC	£2,500,000	£0	
Transport	Demand Management and Travel Planning: Development of Car Parking Strategy for Ely	Ely	£50,000	£0	
Total Assumed Infrastructure Costs					£105,676,001
Total Assumed Funding					£6,000,000
Total Assumed Funding Gap					99,676,001

13. Utilities

INTRODUCTION

- 13.1 The East Cambridgeshire Infrastructure Investment Framework (IIF) (February 2011) carried out an assessment of the major services infrastructure requirements to accommodate Core Strategy growth. This assessment can be found on the East Cambridgeshire District Council website at <http://www.eastcambs.gov.uk/masterplans/district-growth-projectsstudies>.
- 13.2 Since then, a joint Outline Water Cycle Study (WCS) was completed with Fenland District to determine constraints that may be imposed by the water cycle in both districts. A further Detailed (Stage 2) WCS has been completed for East Cambridgeshire based on preferred broad growth areas identified in the Council's adopted Core Strategy, and a number of potential areas identified in the Ely, Soham and Littleport Masterplans. The Water Cycle Strategy can be found here - <http://www.eastcambs.gov.uk/masterplans/district-growth-projectsstudies>.

Electricity

- 13.3 As outlined in the IIF, EDF energy made a high level assessment of the substations where reinforcements are likely to be required, when reinforcements should take place and general cost estimates. The potential cost of electricity infrastructure outlined at Table 13-1. It is assumed for the purposes of this report that this infrastructure would be provided through the providers asset management plan.

Table 13-1: Potential Cost Profile for Electricity Infrastructure

Development Area	Feeder Primary Substation	Cost incurred before period:				Total Cost
		2009-2013	2014-2018	2019-2023	2024-2026	
Ely	Ely	0	£500,000	0	0	£500,000
Soham	Soham	£1,350,000	0	0	0	£1,350,000
Littleport	Littleport	0	£2,450,000	0	0	£2,450,000
Bottisham	Fulbourn	0	0	0	0	-
Burwell	Burwell	0	0	0	0	-
Haddenham & Sutton	Aldreth	0	£1,700,000	0	0	£1,700,000
Newmarket Fr	Exning	0	£2,450,000	0	0	£2,450,000
TOTAL		£1,350,000	£7,100,000	0	0	£8,450,000

SOURCE: AECOM 2010

Gas

- 13.4 As with EDF Energy, National Grid Gas is regulated by Ofgem. National Grid is required to put in place strategic improvements to the network that will satisfy expected growth in a realistic timescale. The Asset Management Plan (AMP) is prepared in advance of each period, currently 2010-2015, so expected growth should be sufficiently committed to allow the additional demand to be included.

13.5 In cases where the actual demand from a development exceeds the existing capacity or that predicted for the AMP, the shortfall in provision should be partially funded by the developer. Improvements to non-strategic mains cannot be included in the AMP and are expected to be funded by the developer, usually through S.106.

Water and Wastewater

13.6 The Detailed WCS study has shown that several Wastewater Treatment Works (WwTWs) have capacity to accept wastewater flow from proposed growth without the need for improvements to treatment infrastructure. This is the case for Isleham, the Newmarket fringes, Stretham, Wilburton, Ely and Mepal. Growth is not constrained by wastewater treatment in these locations.

13.7 At the remaining WwTWs, improvements are required in order to accommodate the growth to ensure that the increased wastewater flow discharged does not impact on the current quality of the receiving watercourses, their associated ecological sites and also to ensure that the watercourses can still meet with legislative requirements.

13.8 The improvements required at WwTWs in Soham, Haddenham, Witchford, Littleport, Little Downham and Witcham are achievable over the plan period within the limits of conventionally applied technology and hence, a solution can be implemented to allow growth in these catchments to proceed.

13.9 However, the detailed assessments have shown that improvements beyond conventionally applied technology are required at both Burwell and Bottisham WwTW (due to water quality). Early phasing of development in these locations may need to be restricted until solutions are developed.

13.10 Where improvements to the wastewater infrastructure are required in advance of the next AMP, 2015, there is the option for developers to forward fund improvements to bring a specific site forward.

13.11 The Water Cycle Strategy also states that the majority of major development sites in Ely, Soham and Littleport will need to fund upgrades or construction of new sewage capacity to ensure that wastewater from growth can be drained from WwTW's.

Water Supply

13.12 The Water Cycle Strategy concluded that East Cambridgeshire would have adequate water supply to cater for Core Strategy levels of growth. However, the Detailed WCS has set out ways in which demand for water as a result of development can be minimised without incurring excessive costs or resulting in unacceptable increases in energy use.

13.13 Recommendations for water supply include: water efficiency in new homes, water efficiency retrofitting, water efficiency promotion, sewer separation, above ground drainage, and sustainable urban drainage systems and green infrastructure.

Waste Management

13.14 The delivery of new dwellings in the County will increase the demand for recycling facilities. Therefore developers could be required to contribute towards the delivery of the new network of recycling facilities. The cost of this infrastructure has not been assessed as part of this report.

13.15 Site-specific utility issues will be dealt with by the individual developer concerned.

14. Infrastructure Overview

INFRASTRUCTURE COSTS AND FUNDING

- 14.1 The following tables set out the headline costs and funding associated with the infrastructure requirements identified in Section 2. The figures are presented for each infrastructure category. It should be noted that the list of infrastructure requirements is not exhaustive, its purpose is to demonstrate a sufficient infrastructure gap to justify a future CIL.
- 14.2 Identified or committed funding is limited reflecting the limited availability of mainstream funding sources for infrastructure to support housing growth. It also reflects the difficulties in identifying funding sources for schemes at such an early stage of their planning or development. Once firm proposals for the schemes set out in this document are developed, it may be easier to identify potential funding sources.
- 14.3 An infrastructure funding gap of £168, 088,134 has been identified. This is equivalent to a funding gap of £43,165 per dwelling.

Table 14-1: Infrastructure Cost and Funding, per Dwelling

	LDF
TOTAL INFRASTRUCTURE COSTS	£49,765
INFRASTRUCTURE FUNDING	£6,599
INFRASTRUCTURE FUNDING GAP	£43,165

Table 14-2: Infrastructure Costs and Funding by Infrastructure Category

	Infrastructure Costs	Project Funding	Project Funding Gap
Education	£46,362,021	£5,475,000	£40,887,021
Healthcare	£7,050,000	£0	£7,050,000
Emergency Services	£230,000	£0	£230,000
Community Facilities	£3,736,772	£0	£3,736,772
Open Space	£6,623,500	£5,773,500	£850,000
Sport and Recreation	£15,658,340	£0	£15,658,340
Transport	£105,676,001	£6,000,000	£99,676,001
Utilities	£8,450,000	£8,450,000	£0
Total	£193,786,634	£25,698,500	£168,088,134

