

## **Cambridgeshire Green infrastructure Strategy Appendix 11 Sustainable Movement**

### **Contents**

- 1 Introduction and definition**
- 2 Baseline information and datasets, including relevant policies**
- 3 What this information tells us**
- 4 Spatial analysis**
- 5 Issues and Opportunities**

---

This Appendix identifies the baseline datasets and relevant policies for Sustainable Movement, which is an important component of Green Infrastructure in Cambridgeshire. These are drawn together to identify the general and spatial issues that relate to this Theme. Conclusions are made about how the issues can be mapped and overlaid to highlight the opportunities that exist for the Sustainable Movement Green Infrastructure Theme.

This map of Sustainable Movement opportunities was combined with the other six Themes, as well as other important issues and assets in Cambridgeshire, to inform and develop the Strategic Network of Green Infrastructure.

### **1 Introduction**

Traditional approaches to people accessing Green Infrastructure (given the limited nature of rural public transport and the location of Green Infrastructure sites) have necessarily emphasised the motor car. A more sustainable approach is now required. This should include effective provision of walking, riding and cycling access from where people live, together with wider linear access networks to link access areas, so as to reduce the need to drive.

#### **Definition**

*A definition of Sustainable Movement for the purposes of the Green Infrastructure Strategy is being supplied by CCC as the Highway Authority.*

## 2 Baseline information and datasets, including relevant policies

### Policy

#### **Countryside and Rights of Way (CROW) Act 2000**

*Text will be included in this section on how the CROW relates to Green Infrastructure. This text is being supplied by CCC as the Highway Authority.*

#### **A Greener Future, Department for Transport, 2009**

This document sets out the government's transport carbon reduction, enabling the UK to meet the requirements of the carbon budgets set under the Climate Change Act 2008. Although it does not specifically refer to the role of Green Infrastructure, the Green Infrastructure Strategy can support the delivery of low-carbon transport choices, such as walking and cycling.

#### **Cambridgeshire Local Transport Plan 2006 – 2011 (LTP2), Cambridgeshire County Council, 2006**

The Local Transport Plan set out targets and strategies for transport, ensuring that large-scale development can take place in the county in a sustainable way. Although it does not specifically reference Green Infrastructure, one of the long-term strategies is 'widening choice', including an "*enhanced network of cycle and pedestrian routes both in towns and linking to surrounding villages and Countryside*". The Rights of Way Improvement Plan (below) is a constituent part of the Plan.

The Local Transport Plan is currently being revised to produce LTP3 and the Strategic Environmental Assessment (SEA) Environmental Report for the LTP3 recognises that; "new transport projects have the potential to impact on the sites of ecological or geological value and more generally on the network of linked multi-functional green spaces, comprising the local green infrastructure, through land take for infrastructure development and through construction and operational impacts as noise, vibration, dust and drainage."<sup>1</sup>

In response, the proposed LTP3 SEA objectives include: "Protect and enhance biodiversity, green infrastructure and geodiversity, in particular designated sites and characteristic habitats and species."<sup>2</sup>

Other opportunities identified for the LTP3 include the following:

- Avoid the fragmentation of green infrastructure, which contributes to protecting natural habitats and biodiversity;
- Enhancement of the green infrastructure through for example foot paths, cycle lanes and other public rights of ways.<sup>3</sup>

---

<sup>1</sup> Strategic Environmental Assessment (SEA) Environmental Report, Atkins, November 2010. p11-12

<sup>2</sup> Strategic Environmental Assessment (SEA) Environmental Report, Atkins, November 2010. p15

<sup>3</sup> Strategic Environmental Assessment (SEA) Environmental Report, Atkins, November 2010. p50

## **Cambridgeshire Rights of Way Improvement Plan, Cambridgeshire County Council, 2005**

Under the Countryside and Rights of Way Act 2000 (CROW), highway authorities must produce a ROWIP that contains an assessment of:

- The extent to which local rights of way meet the present and likely future needs of the public
- The opportunities provided by local rights of way for exercise and other forms of open-air recreation and enjoyment
- The accessibility of local rights of way to blind or partially sighted persons and others with mobility problems<sup>4</sup>

The Right of Way Improvement Plan (ROWIP) contains an assessment of the extent to which local rights of way meet the present and likely future needs of the public. The Plan ultimately seeks to “secure an improved network of local rights of way and access opportunities”<sup>5</sup>. There are eight Guiding Principles of the Plan:

GP1 “Countryside access provision should be physically accessible to the widest possible range of people. Management and improvement of the existing Cambridgeshire rights of way network should aim to increase that accessibility, while new countryside access provision should generally be planned to avoid imposing restrictions. Where an existing path may not be fully accessible to those with limited mobility due to limits imposed by external constraints, such route limitations should be effectively communicated to users.”

GP2 “Countryside access provision should be safe for users. Where significant potential conflict with motor traffic or railways can be demonstrated, then measures to reduce risk will be considered. Where rights of way are subsumed within urban development, then planners will be encouraged to ensure that path design is open and unthreatening. Safety-critical path infrastructure will be regularly inspected.”

GP3 “New development should not damage countryside access provision, either directly or indirectly. New settlements should be integrated into the rights of way network, and improved provision made for the increased population. Where appropriate, development should contribute to the provision of new links and/or improvement of the existing rights of way network”.

GP4 “Up to date, accurate, comprehensive and integrated access information should be made available to all users of countryside access provision.”

GP5 “Countryside access provision should build on the platform of the historical network to meet the needs of today’s users and land managers.”

---

<sup>4</sup> Cambridgeshire Rights of Way Improvement Plan, Cambridgeshire County Council, 2005. p.iv.

<sup>5</sup> Cambridgeshire Rights of Way Improvement Plan, Cambridgeshire County Council, 2005. p.ii.

GP6 “Management and improvement of countryside access should consider the needs of land management, conservation, heritage and concern about rural crime.”

GP7 “The Definitive Map and Statement should be an accurate, comprehensive, up-to-date and accessible record of the public rights of way network in Cambridgeshire. Proposals for legal changes to the network should be promptly resolved and cost effective.”

GP8 “The countryside access experience in Cambridgeshire should be straightforward, enjoyable and inspiring.”<sup>6</sup>

Green Infrastructure is referenced in relation to new development (guiding principle GP3), stating that the pressures that new developments can place on the environment may require new Green Infrastructure provision. Other key objectives of the ROWIP that Green Infrastructure can support are to make the countryside more accessible (GP1) and improving connectivity to ensure a comprehensive rights of way network (GP5).

## **Baseline Information**

### **Public Rights of Way (PRoW)**

Cambridgeshire has an extensive Public Rights of Way (PRoW) network (over 3,000km or 1,800 miles), which is well used by local people. However, there are significant local variations in the extent, quality and connectivity of the network.

Public Rights of Way (PRoW) are highways which allow the public to pass and repass over land which is usually privately owned and managed. Footpaths, bridleways, restricted byways and byways are all highways, differing from roads only in the type of traffic entitled to use them.

- Byways Open to All Traffic (BOATs) provide rights to walk, ride a horse, cycle and drive any road-legal vehicle. While legal rights are similar to those of unclassified roads, byways are maintained principally for the use of riders and pedestrians.
- Restricted Byways provide rights for pedestrians, cyclists, horse riders and horse drawn carriage vehicles but not mechanically propelled vehicles.
- Public Bridleways allow users the right to walk, ride or lead a horse. Cyclists may use bridleways, though technically ‘not as of right’, and must give way to other users.
- Public Footpaths have the most restrictive rights, and provide users with the right to walk with any ‘normal accompaniment’ (e.g. dog, pram or a wheelchair). However, there is no right to ride or wheel a bicycle, nor to ride or lead a horse.

---

<sup>6</sup> Cambridgeshire Rights of Way Improvement Plan, Cambridgeshire County Council, 2005. p.ii.

The Cambridgeshire PRoW network is mapped and managed by the County Council's Rights of Way & Access Team. Additional management is provided by the Highway Divisions (surfaced routes and cycle trails) and through partner organisations including districts, parishes and farmers. There are separate management responsibilities for land managers.

### **Permissive Paths**

Permissive Routes are paths accessible by permission of the owner. Public access is usually for an indefinite period but can be terminated upon three months notice. It is the responsibility of the landowner to maintain these paths.

Environmental Stewardship (ES) is a way of providing for extensive permissive footpath and bridleway access. One of the schemes primary objectives is the promotion of public access and understanding of the countryside<sup>7</sup>. ES offers financial incentives to landowners who set aside land for environmental improvement and public access on a permissive basis, which is a feature of Higher Level Stewardship agreements.

The Cambridgeshire register<sup>8</sup> records around 100 permissive routes, though this is known to be incomplete. The County Farms Estate (CFE) provides extensive permissive access, much of this through Environmental Stewardship. Also of significance are the Anglian Water permissive routes that complete a loop around Grafham Water. Routes subject to Permissive Path Agreements are shown on the County's internal GIS system. The public website currently only shows CFE permissive access, though work is in progress to show more.

### **Verges**

Verges at the side of the roads, maintained by the Highway Authority, provide a significant access resource. The Authority has a duty to maintain them so that they are suitable for the use of horse riders where this is thought to be necessary. In Cambridgeshire verge improvements for walkers, cyclists and horse riders to improve PRoW network connections and to provide safer alternatives to using roads have been successfully developed over recent years.

### **Long Distance Routes**

There are no National Trails in Cambridgeshire although the Trans-European Route E2 follows the line of the Hereward Way, Fen Rivers Way and the Roman Road Link through Cambridgeshire. Major routes at least partly in Cambridgeshire include:

- Roman Road Link – this runs along the Roman Road from Cambridge to Linton and the County border at Horseheath.
- Fen Rivers Way - this runs from Cambridge along the River Cam and Ely Ouse past Ely and Littleport to King's Lynn in Norfolk.

---

<sup>7</sup> Natural England, Entry Level Stewardship Handbook Second Edition, 2008

<sup>8</sup> The Cambridgeshire Register is ADD DEFINITION

- Hereward Way – this lies in the north of the county and links Peterborough and the fenland market towns of Whittlesey and March.
- Icknield Way – this lies in the south of Cambridgeshire from the Hertfordshire border to Suffolk
- Nene Way – this lies in the north of the county and links Peterborough and Wisbech along the Nene Washes and on to Sutton Bridge and The Wash.
- Three Shires Way (part of National Bridleroute) – comes into the west of the county from Northamptonshire and connects with the circuit around Grafham Water.
- The Ouse Valley Way – this runs from Syresham in Northamptonshire to Kings Lynn in Norfolk and enters Cambridgeshire at St Neots, running along the Ouse, the Old West River and the Ely Ouse to the Norfolk border north of Littleport.

### **Promoted Routes**

Leaflets, guidebooks or guided walks can help to engage and encourage people to use access networks for a range of purposes including walking, cycling, visiting places or to address health issues. The County Council promotes specific routes, agreed with the Ordnance Survey. Other routes are promoted by other organisations. Organisations involved in promoting such routes include national agencies such as the Natural England, British Horse Society and The Ramblers. In Cambridgeshire, public authorities including the various levels of local government: parish, district and County Council carry out the majority of promotion, often through joint projects. Other groups promoting routes include Sustrans, cycling groups and bridleway associations.

### **3 What this information tells us**

*Text is being provided by CCC as the Highways Authority that highlights the issues facing the RoW network and how that creates opportunities for Green Infrastructure to support the RoW network, and vice versa.*

The Rights of Way network (including promoted 'long distance' routes and permissive routes) forms the most pervasive network of linear sustainable access routes across Cambridgeshire. This network that allows people to access the countryside and specific Green Infrastructure sites by a variety of means. Using the network can improve people's health and can reduce the need to travel by car or other forms of motorised transport – helping to mitigate against climate change by reducing carbon emissions.

### **4 Spatial analysis**

The above information together with the following baseline information maps has informed the development of the sustainable movement Theme map.

#### **Linear assets**

Figure 11.1 shows the distribution of linear assets across Cambridgeshire. The Public Rights of Way network is illustrated in the top right, long distance routes are shown in the top left.

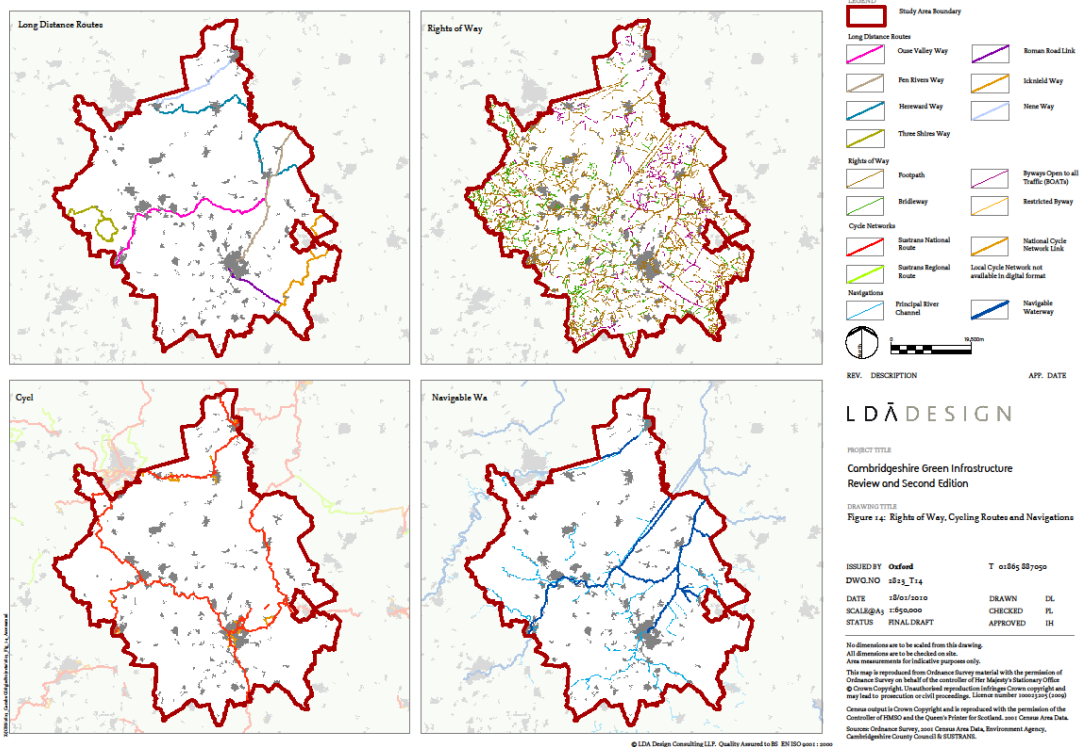


Figure 11.1 Rights of way, cycling routes and navigations



## Countryside Access

There are a variety of publicly accessible Green Infrastructure sites in Cambridgeshire and the map below illustrates their distribution and type. As well as being publicly accessible, these sites have a variety of multi-functional benefits.

There are over twenty Woodland Trust reserves in Cambridgeshire ranging from Archers Wood to Whitethorn Wood, though most are relatively small. There are several National Nature Reserves in Cambridgeshire, some of which have restricted access due to nature conservation considerations.

The local Wildlife Trust has several reserves in Cambridgeshire which are mostly open to the public. Neighbouring County Trusts have reserves adjacent to Cambridgeshire, which serve communities near to the County boundary.

In addition there are several Country Parks including Milton, Wandlebury and Hinchingsbrooke. The National Trust owns land at Wimpole, Anglesey Abbey, and Wicken Fen and Anglian Water offers Grafham Water. The RSPB runs reserves at Fowlmere, Fen Drayton Lakes and the Ouse Washes, where the Wildfowl Trust also operates. Wandlebury Country Park and Coton Countryside Reserve are run by Cambridge Past, Present and Future. In addition there are a range of County Farms access sites, however, these are not illustrated in Figure 11.2.

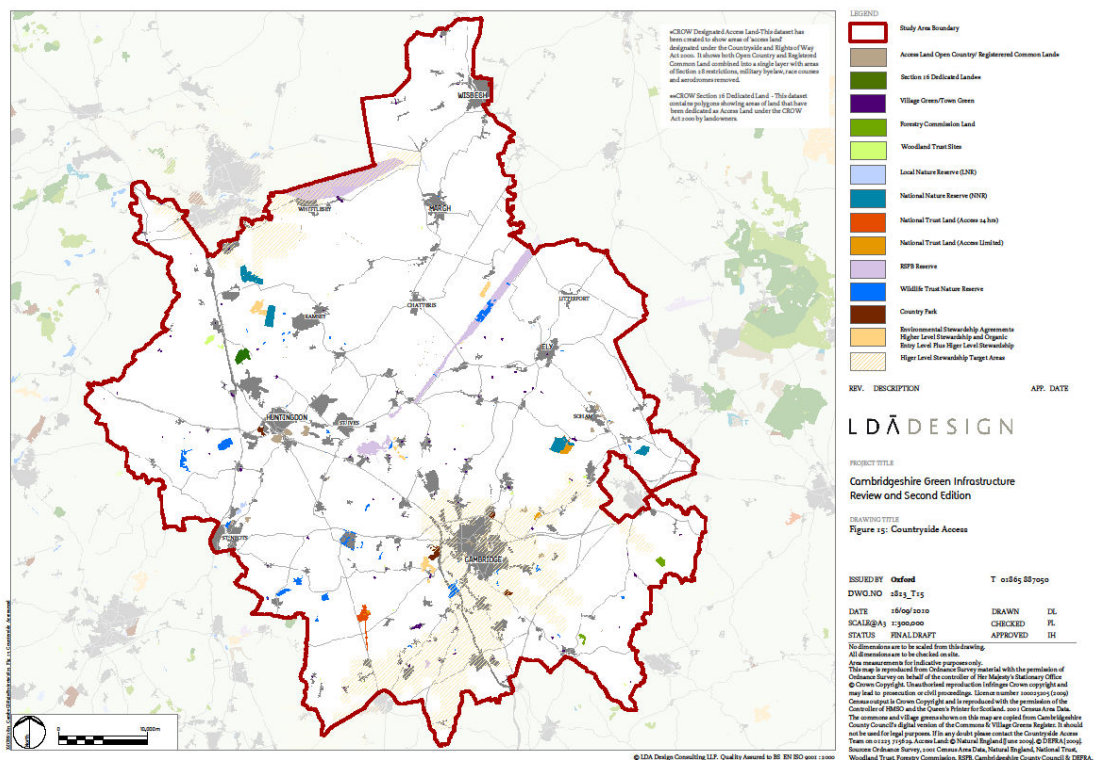


Figure 11.2 Countryside access

## Population Change

Areas of population growth either through housing development or natural increase indicate where more people may want to access the countryside or gain access to Green Infrastructure sites. If these areas coincide with poor Rights of Way provision then the recreational and health opportunities for these growing populations will be limited.

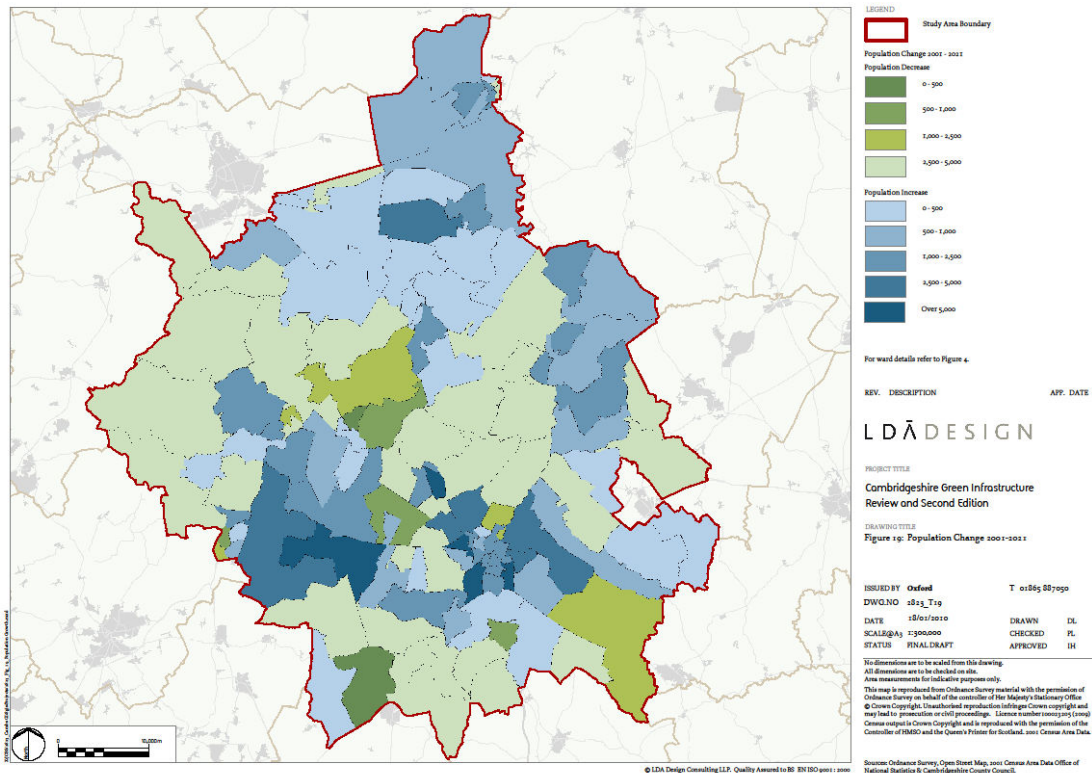


Figure 11.3 Population change 2001-2021

## Population Density

Population density is unevenly distributed across the county and is concentrated in Cambridge, the market towns and some of the rural wards. Whilst linear access provision is important for all residents of Cambridgeshire, at a strategic level with limited resources concentrating on those areas of the county with more residents than very sparsely populated areas will provide the greatest benefit for the majority of residents.

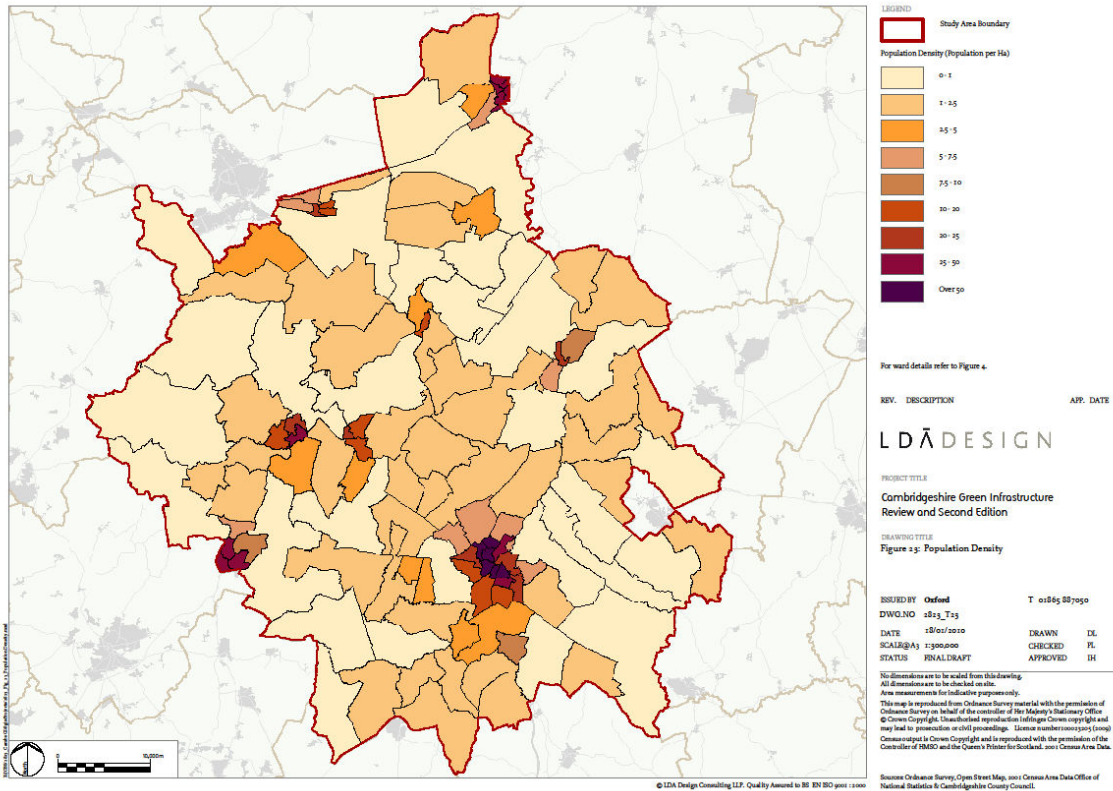


Figure 11.4 Population density

## Major Development

Major housing growth as part of development across Cambridgeshire will create new populations that may want to access the countryside or gain access to Green Infrastructure sites. These sites (and the Cambridge Greenbelt) are shown in Figure 11.5. If these areas coincide with poor Rights of Way provision then the recreational and health opportunities for these new communities will be limited.

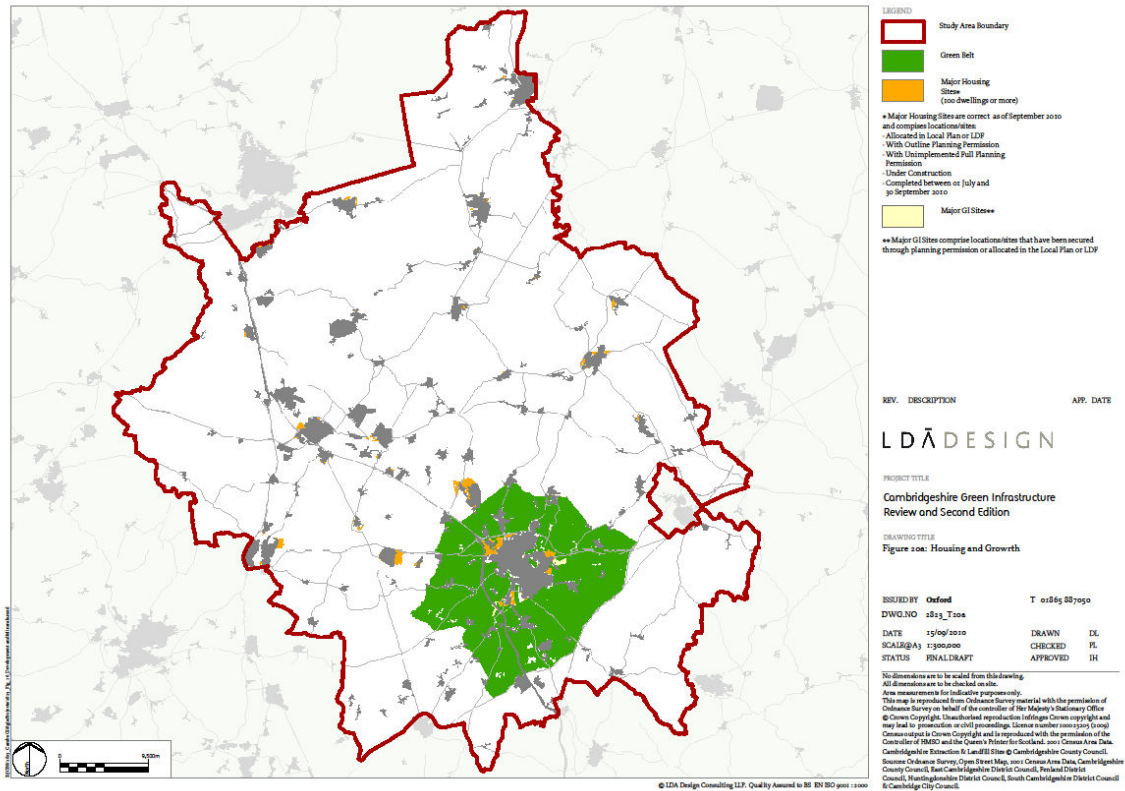


Figure 11.5 Major development sites and the Cambridge Greenbelt.



## Index of Multiple Deprivation

The Index of Multiple Deprivation<sup>9</sup> (IMD) is a detailed measure of deprivation and contains seven domains (individual indices) which relate to income deprivation, employment deprivation, health deprivation and disability, education skills and training deprivation; barriers to housing and services; living environment deprivation and crime. Figure 11.6 presents this information. Rights of Way and other linear access can provide access to the countryside and Green Infrastructure sites. IMD data can therefore be used to identify areas where investment in Green Infrastructure can help mitigate against some of these issues.

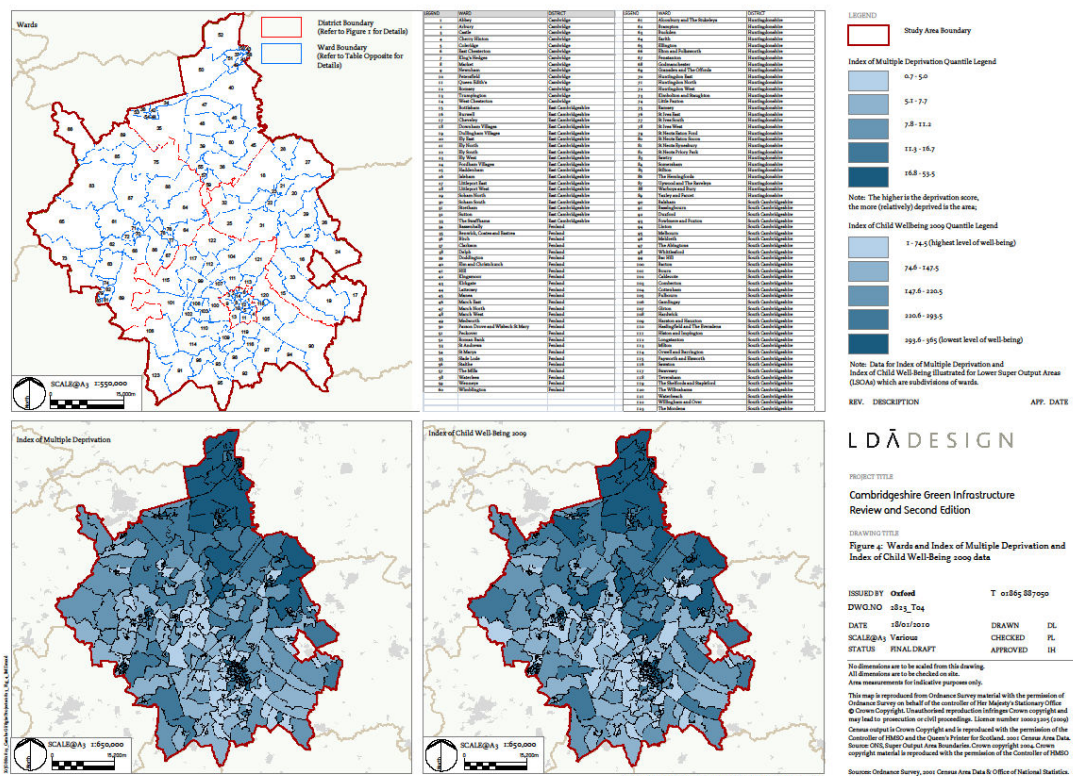


Figure 11.6 Wards and Index of Multiple Deprivation and Index of child well-being 2009 data

<sup>9</sup> <http://www.imd.communities.gov.uk/>

## Settlement Distribution

Figure 11.7 shows the distribution of settlements across Cambridgeshire and is useful for seeing how settlements relate to the existing linear access network.

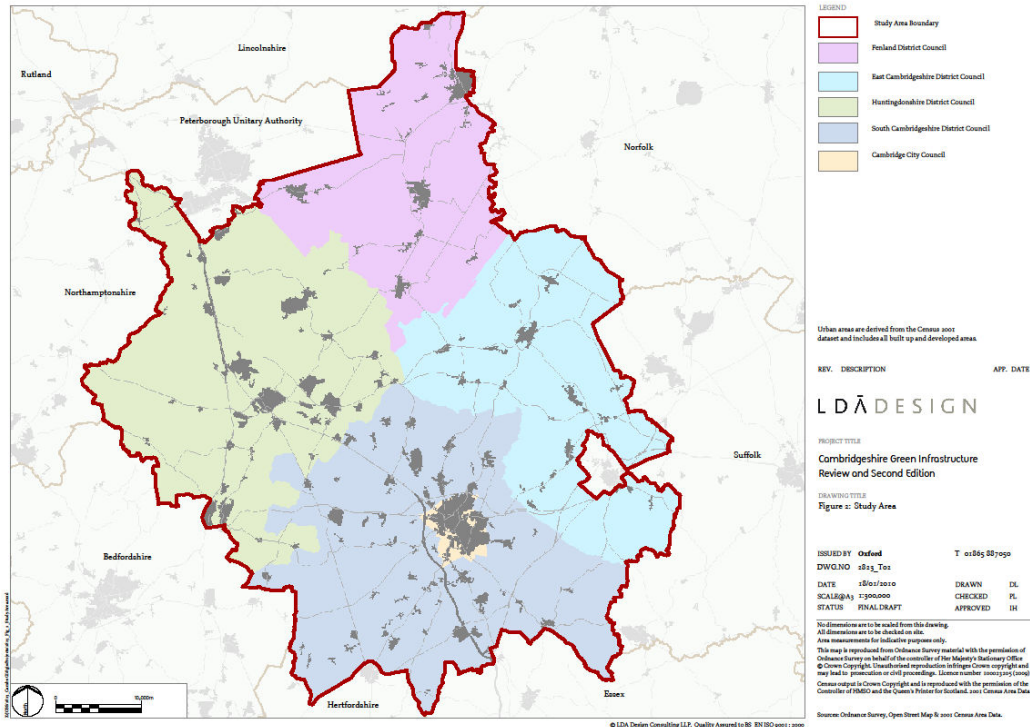


Figure 11.7 Study areas in Cambridgeshire

The sustainable movement theme was developed by analysing the key baseline dataset of the Rights of Way network against the following datasets:

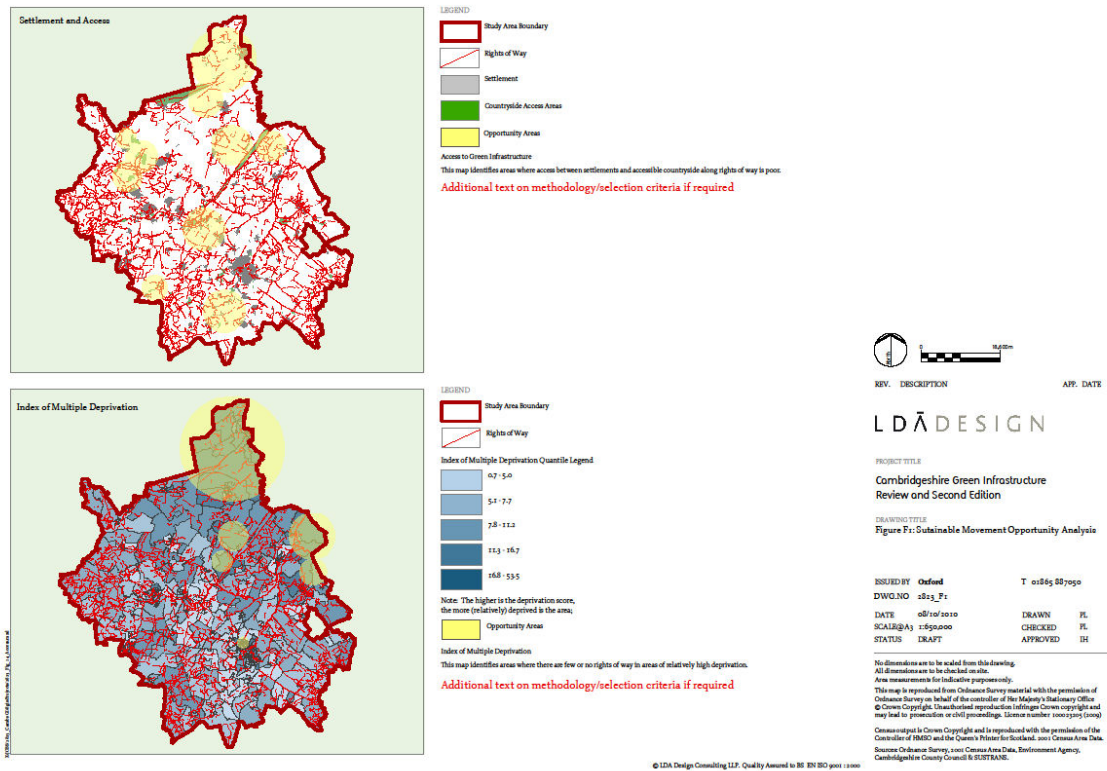
- Settlements
- Publicly accessible Green Infrastructure sites
- Index of Multiple Deprivation
- Population Growth including through major housing development
- Population Density

This analysis highlighted areas where improvements to the Rights of Way network could help address accessibility to the countryside and to Green Infrastructure sites and health and wellbeing issues.

The following were therefore identified through spatial analysis:

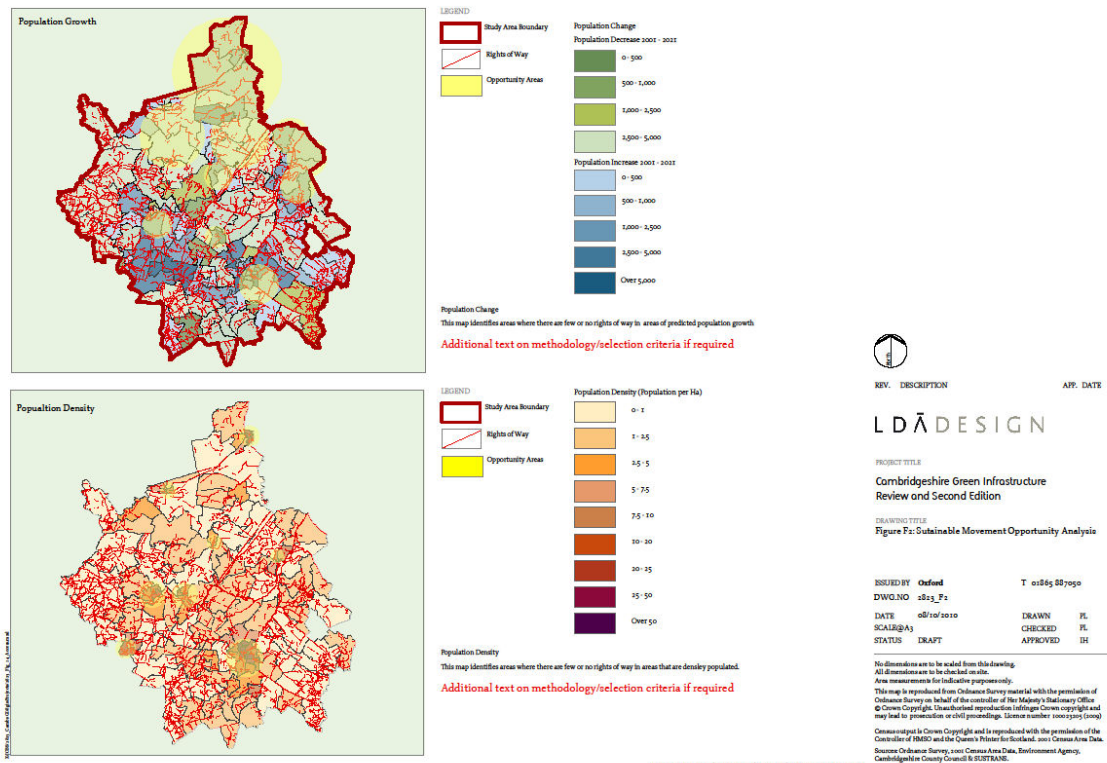
- Areas with poor Rights of Way access between settlements and publicly accessible Green Infrastructure sites
- Areas with few or no Rights of Way in areas of relatively high deprivation as measured by the Index of Multiple Deprivation
- Areas with few or no Rights of Way in areas of predicted population growth

- Areas where there are few or no Rights of Way in areas that are densely populated



**Figure 11.8 Sustainable Movement opportunities in Cambridgeshire**

Figure 11.8 shows areas with poor Rights of Way access between settlements and publicly accessible Green Infrastructure sites (top) and areas with few or no Rights of Way in areas of relatively high deprivation as measured by the Index of Multiple Deprivation (bottom).

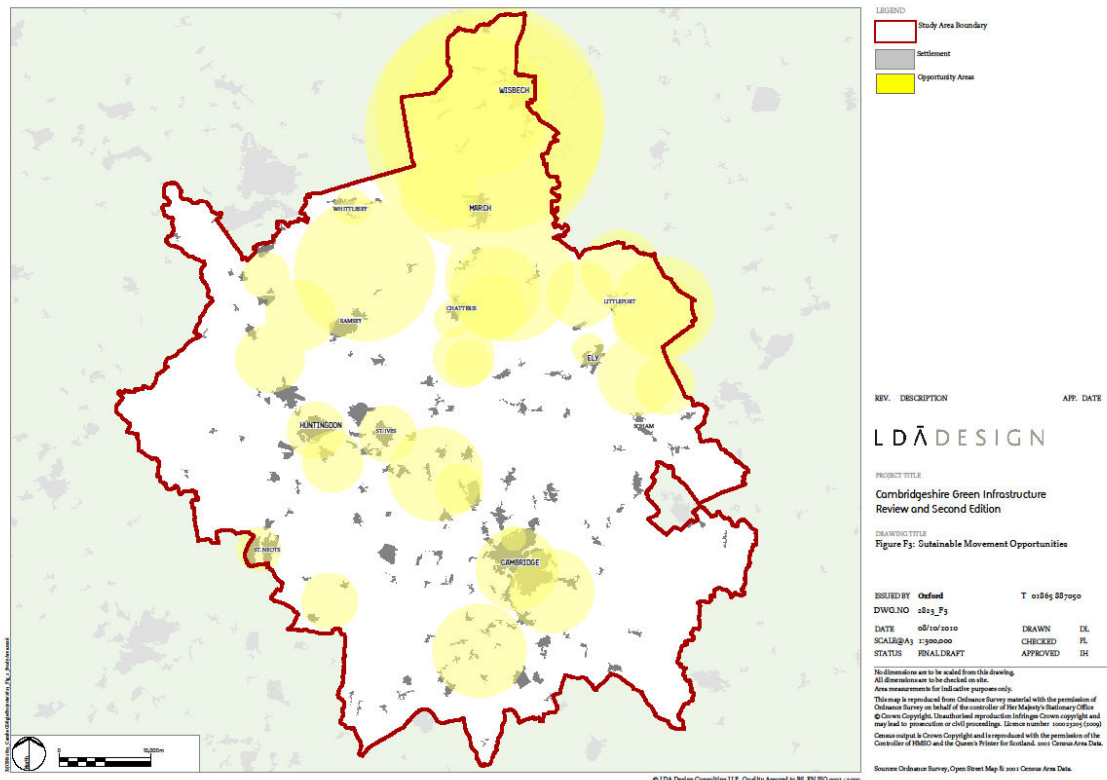


**Figure 11.9 Sustainable Movement opportunities analysis**

Figure 11.9 shows areas with few or no Rights of Way in areas of predicted population growth (top) and areas where there are few or no Rights of Way in areas that are densely populated (bottom).

In bringing these together on a single map areas of concentration can be identified – Figure 11.10 presents this: the darker the highlighted area the more issues that investment in sustainable movement through the Rights of Way network could address.





**Figure 11.10 Sustainable Movement opportunities**

The Sustainable Movement mapping analysis has examined Rights of Way provision with respect to settlement, deprivation and population. This strategic analysis does not consider status (footpath vs bridleway), connectivity (e.g. availability of circular routes) or public transport (e.g. for reversing linear routes) and more detailed comparison of existing networks, user requirements and delivery opportunities will be required during the course of delivering projects.

## **4 Issues and opportunities**

Traditional approaches to people accessing green infrastructure (given limited rural public transport) have emphasised use of the motor car. A more sustainable approach is now required to reduce the need to drive and enable effective provision of linear access for walking, riding and cycling from where people live to the countryside and key destinations.

*Text is being provided by CCC as the Highways Authority that highlights the issues facing the ROW network and how that creates opportunities for Green Infrastructure to support the ROW network, and vice versa. This includes:*

- *Improved Network Provision*
- *Sustainable Access to Green Infrastructure Sites*
- *Long routes provide tourism benefits*
- *Short routes provide benefits for local population's health*

### **Sustainable Movement Case Studies**

#### Northstowe Rights Of Way Project

This large project, created to establish and improve rights of way in the area of the planned Northstowe new town, included a significant heritage element. The project called for a series of interpretation boards presenting a range of stories and histories of the area, as well as improving access to several sites and even restoring a the graves of the Oakington Martyrs in association with the installation of a board.

*Funding: Growth Area Fund Phase II*

#### Permissive Access

The County Council is a major landowner with a large farms estate, and has opened as permissive access some 44 km of path and 260 hectares of open access. These areas often include archaeological sites, and are accompanied by interpretation panels. These sites often become very popular with local people and visitors alike, and become an important part of local Green Infrastructure as well as valued assets. Examples include Stonea Camp in Wimblington, Carr Dyke in Waterbeach and Giant's Hill in Rampton.

*Funding: Environmental Stewardship, Cambridgeshire County Council*