

Cambridgeshire Green infrastructure Strategy Appendix 12 Economic Development

Contents

- 1 Introduction**
- 2 Baseline information**
- 3 What this information tells us**
- 4 Issues and Opportunities**

1 Introduction

Promoting sustainable growth and economic development is one of the four objectives for the Cambridgeshire Green Infrastructure Strategy. To ensure that the Strategy identifies realistic opportunities whereby Green Infrastructure can contribute towards economic development, this appendix sets out relevant policies, strategies, guidance, and baseline datasets relating to economic development. The information presented here was used together with data for the seven themes and the other factors which influence Green Infrastructure to inform and develop the Strategic Network of Green Infrastructure

2 Baseline information

Benefits of Green Infrastructure – Forest Research

The Forest Research report¹ comments that evidence suggests Green Infrastructure provides social and environmental benefits, and these in turn can be 'valued' to give a monetary value of benefits provided; for example the value of increased physical activity. In addition to social and environmental benefits Green Infrastructure can have an impact on the local economy.

The value of good quality accessible Green Infrastructure to the local economy can be quantified through:

- Inward investment and job creation – in the UK there are many instances of economic growth and investment as a result of the provision of well-maintained and managed green space. The Forest Research report gives seven examples of this, including that public sector funding of £425,000 in Portland Basin Green Business Park secured over £1.8 million of private investment due to landscaping improvements.
- Land and property values – developing and improving green space in key locations within urban and semi-urban areas may have significant benefits by increasing nearby property and land values. Investment in green spaces can lead to higher returns for the property sector. Greener areas have a better image and attract more visitors, bringing them retail and leisure spending and providing job and rental opportunities. The Forest Research report provides five examples of this, including that people are willing to pay more per annum per household for a woodland view from houses on the urban fringe.
- Local economic regeneration – economic regeneration means increasing employment, encouraging business growth and investment and tackling economic disadvantages. Investment in green infrastructure involves the creation, improvement and development of green space and landscaping. This investment may encourage and attract high value industry, entrepreneurs and skilled workers to an area through the maintenance and creation of high quality, landscape sensitive, environmentally friendly living and working environment adding 'Gross Value Added' (GVA) to local economies. Local economic regeneration is strongly related to benefits of green spaces such as economic growth and investment, quality of place (including visual amenity), recreation and leisure and tourism. The Forest Research report gives two examples of this.

Using information such as that presented in the Forest Research report, it can be seen that investments in green space can improve a region's image; helping to attract and retain high value industries, new business start-ups, entrepreneurs

¹ Forest Research (2010) 'Benefits of green infrastructure' Report by Forest Research. Forest Research, Farnham. Defra Research Contract no. WC0807.

and workers. This in turn will increase the scope for leveraging in private sector investment, reducing unemployment and increasing (GVA).

The Forest Research report goes on to state that as the UK leaves the deepest recession since 1930s, economic growth as a result of investment in Green Infrastructure will help UK companies succeed in international markets and assists overseas companies to bring high quality investment to the UK. In addition, investment in Green Infrastructure helps to meet the requirements of the UK Sustainable Development Strategy 'Securing the future – the UK Government's sustainable development strategy', published by Defra in 2005.

Natural England's Green Infrastructure by design guide

The guide looks at the impact that Green Infrastructure can have on the economy. The main benefits are:

- Attractive places to live, work and visit are economically more successful places with the potential to increase property values.
- Attractive open spaces incorporating a range of ecological habitat areas provide a strong sense of place, making new developments commercially more attractive.
- Attractive and convenient pedestrian and cycling routes between existing and proposed settlements can support the local economy.
- Opportunities are created for the local green economy and potentially with local landowners through long term supply agreements
- Food production contributes to the green economy whilst also making attractive and sustainable place to live.
- Reduced economic and insurance costs associated with improved water resource management.
- Industries providing solar energy and green roof technologies can create high value, high skilled local employment

Cambridgeshire Local Economic Assessment

As a shared evidence base, the Cambridgeshire Local Economic Assessment highlights the most important economic issues facing the county and districts.

The economic assessment offers a comprehensive view of the economy and is organised into four main chapters:

- Business (including levels of productivity and sectoral strengths);
- People (including skills levels and patterns of deprivation) and;
- Place (including employment land provision and the impact of climate change). Worklessness (nature and scale of unemployment and economic inactivity)

The economic assessment shows Cambridgeshire to have a diverse, relatively resilient economy with nationally significant strengths in research and development, higher education, software consultancy, high value engineering and manufacturing, creative industries, pharmaceuticals, agriculture, processing

and tourism. Many of these sectors are recognised to have significant growth potential which bodes well for the future health of the economy.

The economic assessment shows that the economies of East Cambridgeshire and Fenland lack diversity and are very dependent on lower value manufacturing and processing industries.

Green Infrastructure, sports facilities and arts and culture provision, are all recognised as important in maintaining and enhancing the quality of life of an area. A good quality of life is important in attracting and retaining the best talent and businesses for the benefit of the local economy.

There are significant differences in the incomes, employment levels, skills, qualifications and productivity of different parts of the county which follow a broad 'north-south' divide. For example, levels of prosperity in South Cambridgeshire are considerably higher than Fenland which is the weakest district economically.

Rural Cambridgeshire: Ensuring a Vibrant Future, A Rural Strategy for Cambridgeshire 2010-2015.

The Rural Strategy for Cambridgeshire highlights the importance of economic wellbeing for rural communities in Cambridgeshire. Of particular relevance to Green Infrastructure is the importance of maintaining and enhancing market towns as essential service hubs. Cambridgeshire's ambitions to achieve this include supporting tourism opportunities within and around market towns. The Green Infrastructure Strategic Network will present Green Infrastructure opportunities that could help to meet this ambition, where a Target Area covers a market town.

Socio-Economic factors

Statistical information and the Index of Multiple Deprivation (IMD) for Cambridgeshire highlight the disparities between the north and south of the county. The highest levels of deprivation are in the most rural areas of the region where there is less access to employment opportunities and social infrastructure. The opportunity exists to use Green Infrastructure as a catalyst for regeneration in areas of Huntingdonshire, East Cambridgeshire and Fenland. This could include place making, creating a setting for new high-tech industries; and tourism, perhaps exploiting the extensive Fenland waterways for recreational and leisure activities.

There is the need to respond to relatively high levels of health deprivation. One way in which this could be achieved is by the creation of accessible Green Infrastructure in and around settlements, which would seek to promote recreational activities and address deficiencies in open space. This aspect was identified as part of the development of the Green Infrastructure Strategy during 2009/2010, in the Project Group Interviews and Green Infrastructure Workshop.

There is also the need to respond to areas of relatively high levels of education deprivation. One way this could be achieved is by creating semi-natural green space or sites for food production which offer opportunities for learning and development of skills.

In contrast, there are relatively few areas in the south of the county scoring below the national average for IMD, attributed to the strong economy and good connections to London and the South East. Accordingly, there are high levels of growth and the opportunity exists to use Green Infrastructure to help bring forward sites for housing development. As part of the development of the Green Infrastructure Strategy Review first draft (March 2010), LDA Design worked with the Project Group Interviews to identify that Green Infrastructure has already successfully been delivered in advance of new developments. In the city of Cambridge, where high levels of growth are planned, the Green Infrastructure Strategy should also consider improvement and diversification of existing Green Infrastructure provision.

As demonstrated by 'Deprivation in Cambridge – Individual Indices of Deprivation 2007'² the city of Cambridge contains an area with particularly high levels of living environment deprivation, partly due to the high frequency of cyclist road traffic accidents. Although this indicator exaggerates the level of deprivation, one of the properties for Green Infrastructure in this location could be to ensure appropriate provision of cycle paths. Through working with stakeholders, LDA Design identified that recreational routes should also be linked to other modes of sustainable transport, such as bus routes and park and ride sites.

Index of Multiple Deprivation

The Index of Multiple Deprivation³ (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. IMD data, presented in Figure 12.1, can be used to identify areas where investment in Green Infrastructure can help mitigate against some of these issues.

² Deprivation in Cambridge – Individual Indices of Deprivation 2007, Cambridgeshire County Council Research Group, April 2008.

³ <http://www.imd.communities.gov.uk/>

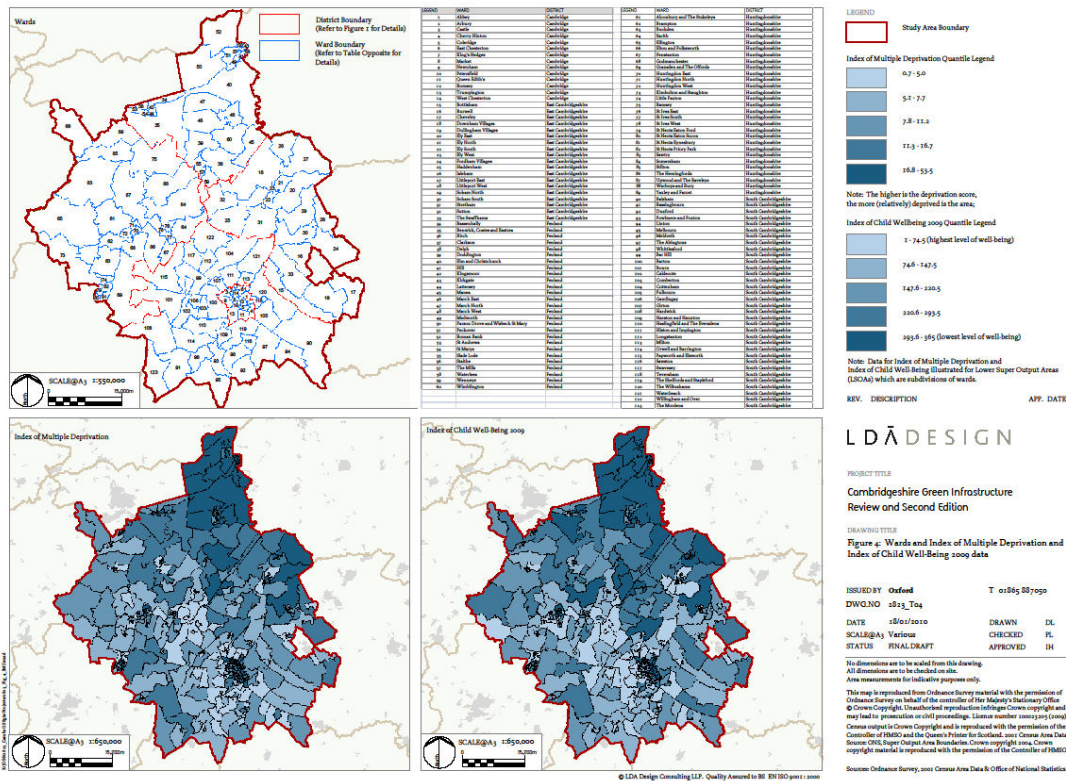


Figure 12.1 Wards and Index of Multiple Deprivation and Index of child well-being 2009 data

South Cambridgeshire has the highest levels of CO2 emissions per capita in the county. One of the objectives for Green Infrastructure in this location should be to provide opportunities to offset emissions from transport and industry.

Several key guidance documents have been reviewed below.

The report **'The Economic Value of Green Infrastructure'**⁴ makes the case for Green Infrastructure as a *"critical component for economic growth and social goals, not just as a way as supporting wildlife and the environment"*.

Bringing together research from ECOTEC and AMION, the study highlights the role Green Infrastructure has in supporting the Northwest's Economic Strategy. The main economic benefits are summarised below:

- **Economic Growth** - Green Infrastructure can improve the region's image, attracting high quality industry and workers;
- **Land and Property Values** - Research shows that property values increase near green spaces. Higher property values themselves are also believed to improve an areas image;

⁴ The Economic Value of Green Infrastructure, Natural Economy Northwest

- Labour Productivity - Greener, more attractive environments increase productivity and reduce sickness. A pleasant working environment can also encourage staff retention;
- Tourism - Green Infrastructure plays a major role in tourism, creating visitor attractions, preserving attractive landscapes and generating economic activity in the service sector;
- Products of the Land - Despite extensive urban areas, the Northwest is still predominantly rural. This offers economic opportunities in locally produced food and drink and energy crops;
- Health and wellbeing - Green Infrastructure can encourage exercise activities which improves health and wellbeing, reducing demand for public health spending and burden of sick pay for employers;
- Recreation and Leisure - Green Infrastructure offers recreation and leisure activities, therefore benefiting employment and visitor spending, while also contributing to a healthier lifestyle;
- Quality of Place - An improved sense of quality of place can attract new visitors and residents;
- Land and Biodiversity - Investment in Green Infrastructure can create and maintain employment in rural industries and land management. This links with the growing natural tourism industry;
- Flood Alleviation and Water Management - Green Infrastructure can help prevent or alleviate flooding, potentially cutting the costs of engineered flood defences; and
- Climate Change Mitigation and Adaptation - Studies suggest Green Infrastructure offers sustainable, low cost ways to adapt to some of the challenges of climate change, regulating temperatures and extreme weather events.

The study also develops a series of tests to measure the value of investment in Green Infrastructure, making it possible to evaluate and support proposals with clear evidence. These include:

- Contribution to GVA – through profits and incomes for companies trading in areas where there is Green Infrastructure investment;
- Ecosystem Services – DEFRA is constructing a framework to assess the value of clean air and water, sustenance and pollination of crops and alleviation of environmental impacts;
- Public Sector Tests – delivery against pre-determined indicators, such as the Regional Economic Strategy indicators and Public Service Agreement targets;
- Private Sector Tests – return of capital investment and costs saved, such as reduced absenteeism and lower expenditure on flood damage repairs;

- CITYGreen – US development system to value ecosystem services and assign values to the components of Green Infrastructure;
- Downstream Economic Effects – creating a more attractive region and thereby drawing in businesses and business users; and
- Risk Reduction – measuring the reduction of impacts of flooding and poor health and calculating the reduced costs.

Natural England has also studied the relationship between a healthy environment and economic growth. **‘No charge? Valuing the Natural Environment’**⁵ demonstrates that natural services provide:

– *“...a highly cost effective solution to growing problems like flood and coastal defence, carbon emissions and the preservation of soil, water and air quality”.*

The report looks at a range of natural ‘eco-system services’ that underpin sustainable growth and economic development. It is estimated that ‘eco-system services’ ‘generate billions of pounds of hidden value to the UK economy each year, far outweighing the costs to sustain them in a healthy functioning state’. Examples of investment include:

- Peatland Management – research shows we are losing between 2.8 and 5.8 million tonnes of CO₂ per year from cultivation and drainage of lowland peat soils. This value of this loss is estimated to be between £74 million and £150 million, comparable to the annual carbon cost of all the UK’s domestic aviation.
- Environmental Stewardship – research by DEFRA estimates that changes to farming practices can deliver savings of 3.46 million tonnes of CO₂ per year, potentially reducing England’s total greenhouse gas emissions by 0.7 per cent annually. The value of these savings is estimated to be around £1.25 billion.
- Green Spaces – vegetation can beneficially modify the climate, especially in cities where heat absorbed by buildings, concrete and tarmac raises temperatures. People living near accessible green space are also more likely to meet recommended levels of physical activity. Increasing exercise levels by 1 per cent could reduce morbidity and mortality rates, delivering £1.5 billion in health care savings.

Recent research by CABI Space considers the value of urban green space in more detail. The study **‘Making the Invisible Visible’**⁶ examined the way parks are valued for local authority accounts. Research discovered that most councils classify their parks as ‘community assets’, with little or no market value. This does not recognise their true worth and fails to justify future investment.

⁵ No charge? Valuing the Natural Environment, Natural England, 2009

⁶ Making the Invisible Visible, CABI Space, 2009

The report suggests 'asset planning management', valuing the individual assets contained within the park in order to determine its true value and assist in long-term management and maintenance. However, the asset value of a park does not necessarily reflect the wider values that the park has for local people. It is therefore also necessary to consider economic, social and environmental value. In relation to socio-economic functions, a range of measureable values were identified. These included:

- Value to businesses
 - Increased property prices
 - Staff retention and productivity
 - Tourism and expenditure in local economy
- Value to local authority
 - Level of satisfaction in local area
 - Attraction of private investment
 - Ability to lever in funding
- Value to individuals/society
 - Improved physical and mental health
 - Contribution to visual amenity and local character
 - Free or low-cost community and education resource

In summary the recently conducted research, reviewed here, demonstrates a strong economic case for the delivery of Green Infrastructure. Economic benefits range from improvements to local business productivity to global reductions in CO2 emissions. The research also provides mechanisms that policy makers can use to evaluate and justify the provision of Green Infrastructure.

Planning Policy Statement (PPS) 4: Planning for Prosperous Communities

This applies to both urban and rural economic development. The government aims to reduce the gap in economic growth rates between regions, promote regeneration and tackle deprivation. For rural areas the government wants to 'raise the quality of life and the environment in rural areas by promoting thriving, inclusive and locally distinctive rural communities whilst continuing to protect the open countryside for the benefit of all'. It emphasises the importance of supporting rural tourism and acknowledges that tourism has the potential to 'benefit rural businesses, communities and visitors, [utilising] and [enriching] rather than [harming] the countryside, its towns, villages, buildings and other features'.

Policy Changes at June 2010

Local enterprise partnerships between locally elected leaders and local business will replace Regional Development Agencies. A Regional Growth Fund will be created to help fund capital projects over two years.

Cambridgeshire ACRE co-manages the **Fens Adventurers Rural Development Programme** (FARDP) with the County Council. FARDP is a £4 million grass roots grants programme which aims to support the start up or the enhancement of rural local enterprises which trade within specific rural parishes within the Cambridgeshire and West Norfolk Fens.

3 What this information tells us

The main benefit of Green Infrastructure seems to be its contribution to the quality of life in a place and for assisting inward investment, business development and attracting well qualified and skilled staff to an area. It is perhaps a more important factor for the *individual* in moving to a place than a *business* who, from surveys undertaken on the reasons for relocating to an area tend rank factors like premises/land costs, staff costs/skills, operating costs and links to suppliers/markets as more important than less tangible quality of life factors including Green Infrastructure. The other factors can all be costed and quantified and it is this that makes or breaks the case for a location.

The Cambridgeshire County Council Economic Development team have commented that Green Infrastructure ranks alongside other factors including arts and culture, sports facilities and leisure provision, which might help a decision to be made on one location compared to another. Green Infrastructure is of increasing importance for tourism with the growth in green tourism, cycle walking and adventure holidays and also short breaks and the more active older/retired population.

In a place like Cambridgeshire there is an expectation from mobile businesses that because the quality of the built environment is reasonably high, the natural/green environment should be similar. Poor Green Infrastructure can therefore be a factor which would count against Cambridgeshire as a potential relocation destination even if other factors made it attractive in cost terms.

Green Infrastructure, sports facilities and arts and culture provision, are all recognised as important in maintaining and enhancing the quality of life of an area. A good quality of life is important in attracting and retaining the best talent and businesses for the benefit of the local economy.

4 Issues and Opportunities

Tourism

Improved and new Green Infrastructure will make Cambridgeshire an even more exciting and interesting place for tourist to visit. Tourism brings with it a high economic benefit to the region. If those visiting Cambridgeshire enjoy their time here, there is the potential for great reputational benefit which in turn will result in Cambridgeshire being an even more popular place to visit work and live. Promotion of green spaces by tourist companies within and just outside of Cambridgeshire is key to capitalising on the opportunities created by tourism.

Within the rural landscape generally, farm diversification can contribute to leisure and tourism opportunities. In the north of the county, where current provision is especially poor, farm diversification could be used to increase the number of visitor destinations and provide local employment opportunities.

New developments

The Green Infrastructure Strategy will provide the evidence required to reasonably request that developers include green space into any new development proposals. This strategy shows that green spaces can realise many benefits including an economic benefit.

Green Infrastructure management

The importance of good management of Green Infrastructure should be stressed. Green Infrastructure must be well maintained and managed to allow its potential for supporting economic development to be realised.