

# Economic growth and investment

## Introduction

Investments in green space have been shown to improve a region's image, helping to attract and retain high value industries, new business start-ups, entrepreneurs and workers. This, in turn, increases the scope for leveraging in private sector investment, reducing unemployment and increasing 'Gross Value Added' (GVA) (NENW, 2008:8).

Developing and improving green space in key locations within urban and semi-urban areas is argued to have significant benefits by increasing property and land values. Hence, investment in green space can lead to higher returns for the property sector. Greener areas have a better image and attract more visitors, bringing with them retail and leisure spending and providing job and rental opportunities. This brings about increases in land and property values (NENW, 2008:9).

## Benefits

Benefits of green infrastructure (GI) include: economic growth and investment; increased land and property values; increased employment levels; increased tourism; increased private sector funding; lower levels of crime; value associated with improved aesthetics; higher quality of life.

## Economic evidence

- The Mersey Forest study estimated that for every £1 invested in the Merseyside Objective One programme £2.30 will be generated in increased GVA over the lifetime (50 years) of the investment (Regeneris, 2009:5).
- In terms of a marginal change a 1% increase in the amount of green space in a vicinity is associated with an increase of up to 0.5% in the average house price (GLA Economics, 2003). Additionally, increasing housing stock increases the value of council tax generated in the locality (GEN Consulting, 2006:14).
- Landscaping improvements at Riverside Park and Winsford, Cheshire, yielded over 16% and 13% of net growth in employment and levered in over £1 million of private investment (Scottish Enterprise, 2008).
- The creation of the National Forest increased the number of local jobs by 4.1% and local regeneration attracted £96 million of investment (CESR, 2004).

- Public sector funding of £425,000 in Portland Basin Green Business Park secured over £1.8 million of private investment (CLES, 2007).
- The Manvers Regeneration scheme by Rotherham Metropolitan Borough Council (MBC) in South Yorkshire has secured £350 million of private investment and provided 9000 jobs (CSI, 2008).
- Due to landscape quality and security improvements at the 57-hectare industrial estate at Langthwaite Grange, Wakefield, West Yorkshire, crimes such as vandalism have fallen by 70% in 12 months (CSI, 2008).
- GEN Consulting (2006) found that regeneration of a run-down area in Glasgow (negative aesthetics and perception) led to house prices increasing by 111%. It was established that once the general property price rises and any other differing factors had been stripped out, the enhancement value of the existing housing stock was in the region of £15 million, and as a result of the scheme new development to the value of £75 million has been realised.
- In a study by CABE (2006) it was found that for properties 'on' a local park the average premium was 11.3% and for properties within close proximity to the park the average premium was 7.3% (standard deviation of 9.4%). An earlier study (CABE, 2004) reported that in The Netherlands a view of a park was shown to raise house prices by 8%, and having a park nearby by 6%.
- Development of woodland can enhance property values in the surrounding area; for example in Bold Colliery, Merseyside, values increased by around £15 million and helped realise a further £75 million of new development (FC, 2005).
- The Glasgow Green Renewal project stimulated the development of 500-750 new residential properties, enhanced average house prices and the total value of property transactions by net £3 million - £4.5 million, increased yield in council tax by 47% and increased the value of the land from £100,000 to £300,000 per hectare (GEN Consulting, 2006).

## Evidence linked to growth and investment, and land and property prices

- As the UK leaves the deepest recession since the 1930s, economic investment as a result of green infrastructure will help UK companies succeed in international markets and assists overseas companies to bring high quality investment to the UK (ONS, 2010).
- Within the Regional Economic Strategy (RES) for regions of the UK, GI is identified as an important resource, with a role for investing in the environment for sustainable growth.

- Investments to improve the aesthetic quality of place (including visual amenity) can be reflected in land and property prices. The impacts of green space on regional and local economic regeneration can be indicated by changes in employment (FTE jobs created), new business start ups, GVA, and land and property prices (Regeneris, 2009).
- Regional and local economic regeneration is strongly related to benefits of green space such as economic growth and investment, quality of place (including visual amenity), recreation and leisure, and tourism (ECOTEC, 2008).

## Practical considerations

Across England there is an ongoing struggle to find capital funding for investment in green infrastructure and for maintaining green spaces to a good standard (NAO, 2006).

There is a large body of evidence that supports the view that investment in improving green space, and as a consequence aesthetic quality, positively impacts on land and property prices. However, the estimated impacts are necessarily case and location specific and have a wide range.

Studies usually evaluate open space close to home primarily related to scenic views and other characteristics, while stated preference studies can capture broader, more general perceived benefits from open land preservation, including non-use values not measured in hedonic studies, for example aesthetics. Stated preference studies can also reveal the particular attributes of open space valued by respondents. Finally, hedonic studies only measure the value of marginal changes in the open space amenity, while the stated preference studies tend to estimate the value of large changes in the amount or provision of the amenity.

## Links to climate change

Investment in GI has been identified as an integral part of the response to mitigate climate change in the UK. There are many economic costs associated with flooding in the UK, including inhibited growth of house prices; increased insurance premiums; clean-up costs for local and central government; reduction in investment; and costs associated with engineering solutions. As increasing emissions of CO<sub>2</sub> and other greenhouse gases could result in a significant increase in summer and winter rainfall and increase flooding, GI can play a significant role in mitigation against climate change: by acting as a carbon sink for absorption of greenhouse gases. Therefore GI can provide environmental cost savings to business, public sector and households.

## Tools

GENECON LLP has been developing a toolbox designed to assist the valuation and case making of green infrastructure investments. The toolbox sets out how different benefits of green infrastructure can be valued:

- In monetary terms, applying economic appraisal tools, where possible;
- Quantitatively (for example, with reference to PSA and other public targets – e.g. jobs, hectares of land, visitors etc); and
- Qualitatively – referencing case studies or important research where there appears to be a link between green infrastructure and societal benefit, but where quantification and/or monetisation is not possible and where other approaches are required to evaluate the benefits.

## Case study

Forestry Commission (2005). Bold Colliery community woodland: district valuer's report on property values. North West England Conservancy, Cockermouth, Cumbria.

## Knowledge gaps

The major knowledge gap in this area is a lack of primary stated preference studies on willingness-to-pay (WTP) for green space improvements that follow best practice guidelines (Eftec, 2010) and can be used subsequently within a value transfer approach. The only GB-wide WTP study (Garrod, 2002) may serve as a basis for planning larger and/or more local studies.

## Citations of national policies/priorities

The UK Government Sustainable Development Strategy. Securing the future: delivering UK sustainable development strategy.

<http://www.defra.gov.uk/sustainable/government/>

Regional Economic Strategy (RES)/ Regional Spatial Strategy (RSS) for all regions in the UK.

[http://www.centuralscotlandgreennetwork.org/index.php?option=com\\_content&view=category&layout=blog&id=11&Itemid=9](http://www.centuralscotlandgreennetwork.org/index.php?option=com_content&view=category&layout=blog&id=11&Itemid=9)

Rural White Paper. Our countryside: the future – a fair deal for rural England.

<http://www.defra.gov.uk/rural/policy/services.htm>

Government's economic strategy (Scotland).

<http://www.scotland.gov.uk/Publications/2007/11/12115041/0>

## References

- CABE (2004). *The value of public space*. Commission for Architecture and the Built Environment (CABE). London. Available at: <http://www.cabe.org.uk/publications/the-value-of-public-space>
- CABE (2005). *Does money grow on trees?* Commission for Architecture and the Built Environment (CABE). London. Available at: <http://www.cabe.org.uk/publications/does-money-grow-on-trees>
- CESR (2004). *Much more than trees 2: measuring the social and economic impact of The National Forest*. Staffordshire University Centre for Economic and Social Regeneration (CESR).
- CLES (2007). *The contribution of the local environment to the local economy*. Research report. CLES Policy Advice for Groundwork UK. Available at: [http://www.cles.org.uk/information/102156/pp13\\_lele/](http://www.cles.org.uk/information/102156/pp13_lele/)
- CSI (2008). *Creating a setting for investment*. Project Report. Available at: [http://www.environment-investment.com/images/downloads/final\\_report.pdf](http://www.environment-investment.com/images/downloads/final_report.pdf)
- ECOTEC (2008). *The economic benefits of green infrastructure: the public and business case for investing in green infrastructure and a review of the underpinning evidence*. Report for Natural Economy Northwest (NENW). April 2008. Available at: <http://www.naturaleconomynorthwest.co.uk/resources+reports.php>
- Edwards, D., Elliott, A., Hislop, M., Martin, S., Morris, J., O'Brien, L., Peace, A., Sarajevs, V., Serrand, M. and Valatin, G. (2008). *A valuation of the economic and social contribution of forestry for people in Scotland*. Final Report for Forestry Commission Scotland. Forest Research, Farnham.
- Garrod, G. D. (2002). *Social and environmental benefits of forestry phase 2: landscape benefits*. Report to the Forestry Commission. Centre for Research in Environmental Appraisal and Management, University of Newcastle upon Tyne.
- GEN Consulting (2006). *Glasgow Green renewal benefits analysis*. A report to Glasgow City Council.
- Genecon (2010). *Green Infrastructure -building Natural Value for Sustainable Economic Development. Valuation Toolbox - User Guide Draft V4.4*. Genecon LLP.
- GLA Economics (2003). *Working paper 3: valuing greenness. Is there a segmented preference for housing attributes in London?* Greater London Authority (GLA), London. Available at: [www.london.gov.uk/mayor/economic\\_unit/docs/valuing\\_greenness\\_paper.pdf](http://www.london.gov.uk/mayor/economic_unit/docs/valuing_greenness_paper.pdf)
- NAO (2006). *Enhancing urban green space*. Report by the comptroller and auditor general. HC 935 Session 2005-2006. National Audit Office, London, 8.
- ONS (2010). *Labour market unemployment*. Office for National Statistics, London. <http://www.statistics.gov.uk/cci/nugget.asp?id=12> Accessed on 16/03/2010
- Regeneris (2009). *The economic contribution of The Mersey Forest's Objective One-funded investments*. Regeneris Consulting. Available at: <http://www.merseyforest.org.uk/pages/displayDocuments.asp?iDocumentID=246>
- Scottish Enterprise (2008). *Additionality and economic impact assessment guidance note*. Scottish Enterprise. Glasgow. Available at: <http://www.scottish-enterprise.com/evaluations-impact.htm>